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MEDICAL ANNALS

Journal of the Alumni Association of the
Albany Medical College

ALUMNI COMMITTEE
H. C. GORDINIER, M.D. ROBERT B. LAMB, M.D. C. G. McMULLEN, M.D.

EDITED BY J. MONTGOMERY MOSHER, M. D.

VOLUME XLII

Ἀσφαλὲς καὶ ἔμπεδον ἔστω τὸ σὸν ἕδος. Ἐκ σκότου μὲν ἔξαγε
φάος, ἐκ δὲ πάθους ἀναψυχήν

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1921

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ALBANY MEDICAL ANNALS, VOLUME XLII

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VOL. XLII JANUARY, 1921 NO. 1

ALBANY MEDICAL ANNALS

Original Communications

ASSOCIATION OF THE ALUMNI OF THE ALBANY MEDICAL COLLEGE—FORTY-SEVENTH ANNUAL MEETING

The forty-seventh annual meeting of the Association of the Alumni of the Albany Medical College was held in the amphitheatre on Tuesday, June 8, 1920. The usual informal reception was held in the college library, where photographs were exhibited, and greetings exchanged between the hours of 9 and 10 A. M. Decennial class reunions were held at times arranged. The meeting was called to order by the President, Dr. Thomas W. Salmon ('97), of New York City, at ten o'clock.

The following named members of the Association, with invited guests, students of the college, and others interested, were present: D. C. Case ('70); G. L. Ullman ('71); F. P. Beard ('75); G. S. Munson, C. E. Wicker ('80); C. C. Duryee, J. H. Mitchell ('81); H. L. Odell, J. W. Poucher ('83); Robert Babcock ('84); E. E. Larkin ('85); D. L. Kathan ('86); C. H. Moore ('87); J. M. Mosher ('89); I. T. Sutton ('90); Walter F. Conley ('91); T. W. Jenkins, Flavius Packer, T. A. Ryan ('93); William George, J. T. McGarrahan, Arthur Sautter ('94); H. L. K. Shaw ('96); J. J. Beard, C. H. Richardson, G. W. Timmers ('97); C. G. McMullen ('98); E. E. Hinman, William Kirk, T. W. Salmon ('99); K. A. Campbell, Luther Emerick, Reid Gilmore, L. H. Humphrey, H. A. La Moure, Louis F. O'Niell ('00); E. G. Griffin ('01); F. S. Sulzmann ('02); C. F. Maxon, J. N. Vander Veer, I. E. Van Hoesen ('03); B. K. De Voe, W. G. Keens ('04); W. M. Dwyer, G. W. Papen, Jr. ('05); F. C. Conway, P. W. Harrig, C. B. Hawn ('06); Tiffany Lawyer ('07); C. B. Phillips, Paul V. Winslow ('08); H. B. Gillen, E. S. Haswell ('09); W. D. Ayer, E. Connally, E. W. Hannock, G. B. Randall, J. A. Sullivan ('10); Abraham Olshansky ('11); J. H. Mitchell, Jr. ('12); J. L. Byrnes, H. S. Howard, E. H. Ormsby, F. J. Williams ('13); D. W. Beard, F. C. Furlong, W. P. Howard, Robert Reid ('14); F. E. Dean, Jr., R. A. Hebert, J. E. Heslin, J. S. Lyons, C. K. Tomlinson, Wm. B. D. Van Auken ('15); E. M. Freund, L. B. Seaport ('16); N. S. Cooper, Irving Van Woert ('17); C. W. Barth, J. Epstein, G. R. Jamieson ('18); A. L. Hayes, J. A. Kelk, Wm. G. Richtmyer, A. S. Schneider, Asher Yaguda ('20); W. M. Baldwin, Melvin Dresbach, A. W. Elting, Otto A. Faust, L. W. Gorham, P. T. Harper, Arthur Knudson, Thomas Ordway, J. A. Sampson (Hon.); E. N. Huyck, Robert Olcott, Hon. A. J. Parker, Luther H. Tucker, (Trustees); Rev. Roelif H. Brooks and Dr. Victor G. Heiser of the Rockefeller Foundation.

On motion of Dr. Kathan the reading of the minutes of the last annual meeting was dispensed with and the minutes were approved as printed in the ALBANY MEDICAL ANNALS.

Dr. Emerick moved that the President appoint a committee of three to nominate officers for the ensuing year. The motion was carried and President Salmon appointed as such committee, Dr. Luther Emerick ('00), Dr. Wardner D. Ayer ('10) and Dr. Reid Gilmore ('00). The Nominating Committee retired to prepare its report.

A verbal report on behalf of the Executive Committee was presented by the Recording Secretary, stating that two meetings had been held during the year for discussion of arrangements for the program of the annual meeting of the Association.

The Treasurer, Dr. Robert Babcock, presented his report for the year, as follows:

TREASURER'S REPORT

Cr.

Balance on hand June 1, 1919	$210.55
Dues received during the year 1919	135.00
Total	$345.55

Dr.

Various bills paid for which vouchers are presented	$170.80
Balance on hand June 1, 1920	$174.75
Cash from Dinner Committee	39.90
	$214.65

(Signed) ROBERT BABCOCK,
Treasurer.

On motion of Dr. Hinman the Treasurer's report was accepted and referred to an auditing committee to be appointed by the President. The President appointed as the Auditing Committee, Dr. Walter H. Conley ('91) and Dr. Garrett V. Timmers ('97), who later reported the Treasurer's accounts correct, and on motion of Dr. Hull the report was accepted.

President Salmon then delivered the annual address.

Dr. Mosher moved the thanks of the Association for the unusually pertinent and classical address of the President, which had been received with marked attention and evidence of approval. The Recording Secretary put the motion, which was unanimously carried, and President Salmon resumed the chair.

Dean Ordway was then called upon and presented his annual

REPORT ON THE CONDITION OF THE COLLEGE

During the past year two of the four original guarantors for a five year trial period of reorganization of this college have died, Mr. J. Townsend Lansing, a member of the Board of Trustees, and Mr. Dudley Olcott, a warm friend. Through the active interest and financial support of these men and their co-guarantors the existence of this college today is due. The deaths of Mr. Lansing and Mr. Olcott have caused a grievous loss to this medical school, not only for their financial support but their sympathetic interest and cooperation were of inestimable value.

Mr. E. N. Huyck, chairman of the finance committee and at a meeting elected president of the Board of Trustees in his address at the luncheon this noon will further describe and discuss the financial situation of the college.

Post Graduate Course in Infectious Diseases and Public Health

This course, given in conjunction with the New York State Department of Health, has been extremely successful. Forty-six physicians enrolled last year and sixty-four this year and of these fifty-nine have regularly attended. Dr. Charles C. Duryee, an alumnus of the college, class of 1881, has been director of this course and deserves the greatest credit for its success. The course has not only been of great educational value but is an added financial support to the college.

At the annual meeting of the Board of Trustees the following appointments have been made: Dr. A. L. Madden assistant in medicine, Mr. W. K. Grigg assistant in clinical pathology, Dr. E. N. Flowers assistant in surgery, Dr. Arthur Krida lecturer in anatomy, Dr. H. E. Marden assistant in pathology, Dr. Joseph O'C. Kiernan instructor in obstetrics, and Dr. Jonathan Pearson and Dr. Lester Betts, Dr. S. S. Ham, Dr. Calvin B. Witter and Dr. W. E. Lawson special lecturers.

The following promotions were also made: Dr. Arthur Benson instructor in pediatrics, Dr. P. W. Harrig instructor in dermatology, Dr. D. Glen Smith instructor in medicine, Dr. G. E. Beilby clinical professor of surgery, Dr. C. G. Mc Mullen clinical professor of surgery, and Dr. A. H. Stein clinical professor of surgery.

Student Activities.

From the educational point of view it is extremely gratifying to record that there were no state board failures among the medical students graduating from the Albany Medical College in 1919, thus continuing the record established in 1918. It is also pleasing to note that recognition of the State of Pennsylvania was restored to the Albany Medical College October 13, 1919, after an unsolicited inspection. Thus the Albany Medical College is not only a Class A school but is now recognized by every State in the Union.

Scholarships.

The Albany Colony of New England Women has established a scholarship of Two Hundred Dollars ($200.00) to be known as the Julia G. McNutt Scholarship to be awarded to a woman medical student, preferably of New England ancestry.

The late Dr. Robert M. Fuller of Schenectady bequeathed a fund to Union College, the income of which is divided into ten scholarships, awarded to students in the Albany Medical College who have taken their premedical courses in Union College. By the terms of the bequest, the committee of award consists of the President and the Dean of the Faculty of Union College, and the Dean of the Albany Medical College. These scholarships will be given only to those students who have shown, while in Union College, general mental and physical fitness for the work of the medical profession, and who have excelled in the premedical courses in chemistry. Five of the scholarships are reserved for those students who, at the time of entering the medical college, have received or are candidates for a bachelor's degree from Union Collge. The other five may be awarded to students who have completed the two years premedical course.

Relation to Union College.

The more intimate relation of the Albany Medical College to Union College is strengthened by the above bequest. During the past year also two joint meetings have been held by the Faculty of Union College and of the Albany Medical College, one at Schenectady at which an informal talk was given by Prof. March on the development of psychology and another in Albany when Dr. J. M. Mosher explained an original diagram of the mechanism of normal and abnormal mental activities.

Following the custom of the last two years the joint commencement in connection with the exercises at Union College was held and is now an established custom and offers the dignity of a true university commencement.

Brief Review of the Activities of the Albany Medical College During the Past Five Years—Why the Reorganization Was Necessary.

The Albany Medical College was reorganized in June, 1915. This reorganization was necessary because of the fact that although in one sense the school was not a commercial one yet it depended for its existence almost exclusively upon the fees received from the students and the excess of fees were distributed among various members of the teaching staff which left little with which to develop the teaching facilities. Although in part there had been a departure from the old time didactic methods the classes were not rigidly limited and didactic methods were employed to a greater extent that in the most approved schools. In the state board licensing examinations of New York State for the previous ten years there had been an average of 20% of failures and a maximum of 50% of failures. The state of Pennsylvania did not recognize, that is, did, not admit to their licensing examinations, graduates of the Albany Medical College. Both of these facts had led to a great deal of criticism and the latter was particularly embarrassing for several of the graduates of this school. The Carnegie report of 1910 was distinctly adverse and though in certain respects harsh, notably in its criticism of the library facilities, in the main the report fairly represented the condition. The relation of the Trustees of the Albany

Medical College to Union College was merely nominal and indeed the Trustees of the medical college were little more than nominal to the activities of the college itself, the faculty assuming both educational and financial management.

How the Reorganization Was Accomplished.

With the above in mind the Board of Trustees secured estimates from other medical schools and found that in general the expense varied from $50,000 to $70,000 in a school of the size corresponding to that of the Albany Medical College and in one instance where full time clinical teaching was employed the annual expenses were $225,000. An estimate was prepared by the present dean at the request of the Trustees on the basis of an expenditure of $35,000 a year increasing to $50,000 within five years and not including primary equipment and certain expenses for administration. On the basis of this estimate a guarantee fund for four years was subscribed to cover this estimate and the reserve on hand insuring a similar sum for another year made possible a five year experimental period on the basis of the estimate above referred to. In addition to this estimate it was set forth that in order to place the teaching on a proper basis two additional matters were of fundamental importance: first, the limitation of the number of students in order to maintain the intimate personal relationship between the teacher and student, and second, true university control which is recognized as essential in any medical school today. This was secured by reorganization of the executive committee of the Board of Trustees of the Albany Medical College so that nine of the fifteen members were also members of the Trustees of Union College; and limitation of the executive faculty to the heads of the major departments, the dean of the medical college and chancellor of the university and minor departments only in rare instances when the men holding such positions were of recognized national ability and in no case this executive faculty to exceed ten. The advantage of such a small working faculty is manifest.

Difficulties Encountered.

Such radical steps, necessary from both financial and educational points of view, naturally met not only with a lack of real cooperation but a certain degree of general and personal opposition for some of those concerned in assisting in the reorganization. There were certain endeavors to restrict the use of clinical material in various hospitals and dispensaries. The reorganization of the Board of Trustees of the Bender Laboratory was a severe handicap to the medical college because no representative of the Albany Medical College was given a place on the Board of Trustees of the Bender Laboratory although in the past members of the faculty of the Albany Medical College had formed almost the entire Board of Trustees of Bender Laboratory. The raising of the requirements for the medical student qualifying certificate to two premedical years at this particular time caused temporarily marked reduction in the number of students and, therefore, a lessening in the fees derived from the students. This deficiency, however, was made up by the Trustees and other friends of the college in addition to the guarantee above referred to. The change in the method of clinical teaching, the small sections of three or four students acting as clinical assistants, made necessary certain changes in the organization of the Albany Hospital, particularly the establishment of a department of dietetics and a department of laboratories, the former for more careful medical care of the patients and the latter because laboratories are as essential to the internist of to-day as the operating room is to the surgeon. Because of the lack of representation of the Albany Medical College on the Board of Trustees of Bender Laboratory it was necessary to construct an entire new pathological and clinical laboratory in the Albany Hospital. The world war caused an almost impossible situation due to the lack of members of the teaching staff who volunteered in various branches of the service and notably in the base hospital organized and equipped by the cooperation of the Albany Medical College and the Albany Hospital, known as Base Hospital 33. The death of three trustee guarantors within a year and a half was critical to the success of the reorganization.

RESULTS OBTAINED.

In spite of the difficulties above mentioned the following results have been obtained. The five year period has shown the reorganization has been an unqualified educational success. The state board failures for the past ten years have averaged twenty percent with a maximum of fifty percent. No graduate of the year of 1918 or 1919 failed. The state of Pennsylvania after an unsolicited inspection now recognizes the graduates of the Albany Medical College. The premedical course at Union College has been markedy improved by the close cooperation of a committee from the Albany Medical College and Union College. The attitude of medical educators and others interested in medical education towards the Albany Medical College is shown in the following abstract from a letter of Dr. H. M. Biggs, Commissioner of Health of the State of New York: "The Albany Medical College, situated in Albany, has about one hundred students. Within recent years it has been reorganized and is giving excellent courses of instruction. Hospital facilities in Albany are adequate for the demands of instruction - - - - the small medical schools like the one in Albany, when properly conducted and administered, are having an important influence on medical practice and public health in the rural districts." Grants for scientific research from the Elizabeth Thompson Science Fund to the departments of chemistry, physiology and anatomy and grants from the United States Interdepartmental Social Hygiene Board to the departments of medicine, biological chemistry, anatomy and pathology are of significance. The work of the department of anatomy under the direction of Dr. W. M. Baldwin of Cornell has been unusual in the technical training of the students and from the general attitude toward the work. The refitting of the entire department of anatomy and housing in the former museum and the construction of a laboratory of histology adjoining have been most helpful in improving the quality of the instruction. In cooperation with the Genereal Electric Company Dr. Baldwin has prepared several scientific papers on the effect of radiation upon developing organisms. In the department of physiology Dr. Melvin Dresbach of Cornell has re-equipped the old chemical lecture room into a laboratory for experimental physiology and pharmacology thus allowing the students opportunity and facilities for individual work in these respective subjects. Dr. Dresbach has also taken charge of the clinical physiology at the Albany Hospital, having immediate charge of the electrocardiographic work. Dr. Arthur Knudson of Columbia has re-equipped the old chemical laboratory into a research laboratory in biological chemistry and has charge of the new chemical laboratory at the Albany Hospital where his assistant is resident chemist. In pathology Dr. George S. Graham of Dartmquth has had charge of the equipment of the new pathological laboratory above referred to and acts as attending pathologist to the Albany Hospital, cooperating intimately with the clinical branches. In the clinical branches of medicine and surgery and the sub departments intimate, personal, bedside instruction and experience under the immediate supervision of the heads of the departments is given to students in small sections who act as clinical assistants, thus offering the students certain of the advantages of the old preceptor system, as well as of new laboratory advantages for medical practice, which is in a sense a trade as well as a profession and must be learned in part in the intimate close association with men of broad training and wide experience.

The reorganization has proved an economic success for the total cost per year has not exceeded the estimate above referred to except during the year when it was necessary to construct a new pathological laboratory. The cost per student has varied from $400 to $450 a year so that the students' fees have covered less than half of the cost of instruction. Therefore, the school in one sense can be considered commercial for it is generally recognized today that educational and charitable institutions cannot be run on an efficient basis from the fees received but must be supported in the form of endowments or special donations. In certain other schools the cost per student varies from $1,000 to somewhat over $3,000 per year. The closer relationship to Union College has been mentioned above and is particularly emphasized by the joint commencement which has been held with Union College at Schenectady during the past two years.

On motion of Dr. Thomas W. Jenkins ('93) the report of the Dean was accepted, and a copy was requested for publication.

The report of the Historian of the Association, Dr. Bedell was then presented by title and ordered entered on the minutes.

Report of the Historian, Arthur J. Bedell, M. D.

Mr. President and Members of the Alumni Association: Again it has been the misfortune of your historian to be absent on Alumni Day, this year to attend the meeting of the American Ophthalmological Society for the two days preceding the meeting of the American Medical Association.

I wish to report that we have written several letters to the historians of each class and trust that they are now present and ready to report regarding their classes.

The work of compiling the military record of our Alumni is in progress. An expert compiler is going over the army records and before the next meeting of our Association, I trust that the record will be published.

Your historian has nothing new to report but makes the suggestion that a member of each graduating class be elected historian so as to keep class records which will be of so much value and interest in later years. He therefore, urges the members of the Class of 1920, who are today admitted to membership in our Alumni Association, to form such a class union that they will not drift apart. I am sure that their desire will be to keep in touch with their medical school and by having a real class association that will be most easily accomplished.

During the year twenty-seven of our members have died.

Necrology

Col. Henry McLean Cronkhite, June 15, 1919, 1858, New York, N. Y.

Salphronius H. French, April 30, 1920, 1859, Amsterdam, N. Y.

Washington Kilmer, November 24, 1919, 1860, Orlando, Fla.

Robert Mason Fuller, December 27, 1919, 1865, Schenectady, N. Y.

Charles Long, July 8, 1919, 1867, Salemville, Pa.

David Norwood, November 24, 1919, 1867, Esperance, N. Y.

James Haggerty Struble, December 3, 1919, 1869, Kearny, N. Y.

Harris J. Cornish, April 14, 1919, 1870, Walworth, N. Y.

Col. John Van Rensselaer Hoff, January 14, 1920, 1871, Takoma Park, D. C.

James H. Gallup, February 2, 1920, 1871, Delmar, N. Y.

Edwin Jay Fisk, August 31, 1919, 1871, Troy, N. Y.

Melvin H. Turner, December 12, 1919, 1873, Ticonderoga, N. Y.

Horrace C. Wiggins, January 12, 1919, 1873, Succusuna, N. J.

Dormar Baldwin, June 26, 1919, 1877, Oneonta, N. Y.

George H. Houghton, June 15, 1919, 1882, Albany, N. Y.

Louis Nott Lanehart, April 25, 1920, 1883, Hemstead, L. I.

Michael J. Lawler, March 7, 1920, 1890, Carthage, N. Y.

Frederick A. Williams, May 2, 1919, 1892, Poughkeepsie, N. Y.

Albert Carlban Baxter, December 1, 1919, 1896, Oswego, N. Y.

Herman Wilkowar Katz, June 19, 1919, 1897, Elizabeth, N. J.

William J. Green, May 27, 1919, 1898, Saratoga Springs, N. Y.

Robert S. Lipes, December 9 1919, 1907, Hudson, N. Y.

Homer Andrew Bushnell, December 31, 1919, 1905, North Adams, Mass.

Charles Fredderick Myers, July 30, 1919, 1910, Albany, N. Y.

John F. Beiermeister, October 24, 1919, 1910, Rochester, N. Y.

George Victor Genzmer, January 30, 1920, 1913, Verona, N. J.

William P. Sweeney, July 30, 1919, 1915, Saratoga Springs, N. Y.

The history of the Class of 1870 was presented by Dr. Daniel C. Case.

HISTORY OF THE CLASS OF 1870.

E. S. Allbee, died May 14, 1913.

W. W. Appley, Cohocton, N. Y.

R. H. Cameron, died April 26, 1890.

D. C. Case, Slingerlands, N. Y.

C. H. Chamberlain, dead.

H. J. Cornish, died April 14, 1919.

P. I. Cromwell, Arcadia, Nebraska, retired.

W. N. Curtis, died June 6, 1889.

J. C. De Freest, died August, 1874.

E. W. Dutcher, died September 24, 1898.

Wm. Hailes, died July 6, 1912.

F. E. Johnson, no information.

L. L. King, dead.

W. H. Kinnier, died September 9, 1918.

D. M. La Moree, died February 12, 1913.

K. V. R. Lansing, died April 13, 1879.

C. M. Lefler, died October 6, 1915.

T. H. Mann, died March 2, 1916.

Frank McRae, Melrose, Fla. No reply.

R. H. Neefus, died February 18, 1910.

L. J. Purdy, was at Smithville Flats, N. Y., at last accounts, but is not in State Society Directory.

B. U. Steenberg, Albany, N. Y.

W. G. Tucker, Albany, N. Y.

L. E. Wells, was at 44 Myrtle St., Boston, at last acount. Name not in Boston directory.

A. B. Willis, died May 9, 1891.

Ross Wilson, dead.

This does not include the names of J. M. Bigelow and Maurice Perkins—

both dead—who received honorary degrees at our graduation but, not being members of our class, omitted their names.

Dr. William W. Appley, Cochocton, N. Y., writes: "The next year after leaving college I married and settled down here in practice with my Father, who died six years later, leaving me with quite a large practice and I have retained it since, though for the last two years I have had to let upon the hard work and get a younger man to help me out. I never aspired to any public office though I have been honored with some quite important positions but I will leave that for some one else to write after I am gone. I have nothing in particular to find fault about my lot. The Lord has been good to me. My wife and daughter are still with me and pretty well. I would love to attend the meeting and shake hands with the members of our class that may be living yet, but am afraid there would not be many left after fifty years."

Dr. Daniel C. Case, Slingerlands, N. Y., writes: "I was after graduation located at Stamford, Delaware County, N. Y., where I was engaged in general practice until the fall of 1877 when I located at Slingerlands, N. Y., remaining there until the present time, always devoting my time to that of general practitioner. Still in the harness and expect to be as long as my physical and mental condition permits."

Dr. P. I. Cromwell, Arcadia, Neb., writes: "Your favor of the 14th inst. is just received, and in reply will say that I am pleased to learn that at least one of my classmates is still in the harness. As for myself, after over forty years in active practice I have given it up completely, and am now living on the income from my farm in Custer County, Nebraska. I was never a strong man physically, and on that account have changed locations frequently during my years of practice. I have always had more work than I could easily handle, and as I grow older the burden became such that about eight years ago I retired completely and at present am doing nothing.

"But during the war, two years ago, I was induced to take over the practice of Dr. H. R. Hess, at Tiskilwa, Illinois, while he served six months in the Army and I was very busy during that time, attending mostly influenza cases. The roads were good and the weather fine and I rather enjoyed getting back into the harness. But now I find myself afflicted with kidney disease and high blood pressure, and consequently am trying to take good care of myself so as to prolong my existence. I am seventy-two years of age and I believe the youngest of our class, and I would like very much, were it possible, to attend our reunion."

Dr. Byron Usher Steenberg, Albany, N. Y., writes: "The years have passed all too swiftly since that happy hour in December, 1870, when our diploma was received and we stood ready to step out upon the chosen work of our life. Almost fifty years of ceaseless service have gone by in an effort to relieve the ills and sufferings of humanity. It has been an arduous life—as that of a busy physician must of necessity be—but the usual allotment of sunshine and shadow has tempered the years—and now—standing amid the evening shadows and the work of life almost at an end—reviewing all—there is not one regret for the youthful choice of a profession so great in opportunity to serve humanity—my only regret being that I have not served more wisely. The majority ot that happy class of '70 have passed into the great beyond—and but few of us are left. Nothing would give me more pleasure to-day than to look into your faces and feel the clasp of your hand—but the weight of years keeps me closely tethered to home. To all—with deep feeling I utter the words: 'Hail and farewell.'"

WILLIS GAYLORD TUCKER, Albany, N. Y. Born Albany, October 31, 1849. Assistant Professor of Chemistry Albany Medical College, 1871-1874, and subsequently Lecturer on Materia Medica, Adjunct Professor Materia Medica and Chemistry, Professor Inorganic and Analytical Chemistry, Medical Jurisprudence, and Toxicology, and from 1901 to 1915, Professor of Chemistry and Toxicology. Probably served as a teacher in the college for a longer continuous period than any other teacher who has been connected with the school.

Registrar of the faculty, 1882-1913, and served longer in this office than any other. Dean of Faculty, 1914-1915.

Co-operated with Henry B. Whitehorne and S. Oscar Myers, members of the graduating class, in the organization of the A. M. C. Alumni Association in 1874 and one of its incorporators. Secretary of the association, 1874-1896; recording secretary, 1886-1897; and president, 1898.

One of the founders of the Albany College of Pharmacy in 1881. Professor of Chemistry and Toxicology in same, 1881-1918; trustee, 1898 to date; Dean of Faculty, 1883-1918, and Honorary Dean, 1918 to date.

During, various years professor of chemistry in Albany Academy Albany Female Academy and St. Agnes' School, and professor of chemistry in Albany High School, 1876-1887.

Analyst State Board of Health of New York, 1881-1891; director State Board of Health Laboratory, 1891-1901; and Director Bureau of Chemistry, N. Y. State Department of Health, 1901-1907.

Member Board of Medical Examiners, University State of New York, 1882-1891. Member Board of Governors Union University, 1884 to date. Member editorial staff ALBANY MEDICAL ANNALS, 1883-1887, and member alumni committee on publication of same, 1899-1917. Trustee Bender Hygienic Laboratory, 1905-1915.

Member Medical Societies of the County of Albany and of the State of New York; fellow American Association for the Advancement of Science; member American Chemical Society; member Sigma Xi. Received honorary degree of Ph. G., Albany College of Pharmacy, 1882, and Ph. D., Union, 1882.

Author of various papers on chemical subjects, chiefly in the direction of sanitary chemistry, food and drug adulteration, water analysis and toxicology, published in various medical and chemical journals and official reports.

Office, 80 Howard Street, Albany, N. Y.
Residence, 459 State Street, Albany, N. Y.

The history of the class of 1880 was read by Dr. George S. Munson, for Dr. Morse, the Historian, who was unavoidably detained

HISTORY OF THE CLASS OF 1880.

At one time when Mr. Roosevelt was President he was much disturbed when congressmen from the north-western States sought the plums for their Danish and Swedish constituents. One day when Senator Carter of Montana a full son of the Emerald Isle, entered the President's room, the only Teddy sprang up, caught him around the waist, and waltzed him up and down, singing:

" O, the Irish and the Dutch,
They don't amount to much;
But hurray, hurray,
For the Scan-di-na-vi-ans! "

The heavy business to-day is to hurrah for the Class of 1920 and the Class of 1870, above all others; but just a word for the Class of '80. On that halcyon day, forty years ago, we would have resented being told that the Class didn't amount to much; for at that time we were sure that we knew more about everything than we do about anything now. There were forty-seven members. Of that number seventeen survive.

The first of the thirty to go, if we are not mistaken, was HORACE S. KNOWLES, who died before the ink was fairly dry on his diploma. Only a few days after completing his first year of professional life, HENRY W. WRIGHT met a tragic death. In 1882, Jan. 24, OSCAR A. ELLITHORP died, and on May 30, WILLIAM A. LESTER, after a long period of suffering, passed away. In 1883 death claimed C. H. PHILLIPS and MICHAEL HUGHES. In 1884, December 3, FRANCIS O. CORNELL of Port Jackson died. In 1888, April 19, the shining mark was T. D. WORDEN, of Fort Plain, N. Y. The following year saw the deaths of F. J. MERRINGTON, August 14, here in Albany; CORNELIUS J. (" CHUM ") LETCHER on Christmas Day at Petersburgh, N. Y.; and (although we are uncertain as to date) W. E. KEEGAN. In 1890 we lost on January 30, A. C. MONTGOMERY at Walton, N. Y., and June 17, WILLIAM F. BELL at Alabama, N. Y. In 1891 two of the boys died here in Albany,—D. P. SHEVLIN, May 9, and W. H. HAGADORN, July 2. 1894 witnessed the loss of S. S. DELAMATER, October 29, at Palmyra, N. Y. After that it was nearly seven years before another death, when at St. Johnsville, N. Y., on May 8, 1901, ALONSO P. CASLER was called away.

1903, July 29, G. H. RACE, the leading practitioner of Southern Berkshire, died at Great Barrington, Mass. 1904, March 10, L. P. SWARTOUT died at Oneida. 1907, August 15, C. E. PARISH died at Maryland, N. Y., and 1908, March 20, H. A. WHITE at Fort Plain, N. Y. 1910, January 23, A. H. ECCLESTON'S death occurred at Providence. Almost precisely a year later J. W. GOULD died at Newark, N. J 1913, November 14, E. C. COLLINS died at Springfield, Mass. 1915, March 23, our original historian, C. B. HERRICK, died at Troy. March 21 of the same year L. B. HOIT died in New York, and April 18, R. W. WARNER at Ilion, N. Y. 1916, January 7, at Brooklyn, N. Y., W. B. PALMER went, to be followed June 19 by J. S. WHITE at South Glens Falls. ERASTUS A. TAYLOR of Schuyler's Lake, N. Y., was the last to go dying last year, March 12.

Before speaking of the surviving members of the Class, all may be interested in a poem, characteristic of him whom we called "Chum":

"The angel and the doctor
 Started up to glory's gate,
But when passing close to Hades,
 The angel whispered, 'Wait,
I've a place I want to show you,
 It's the hottest in all hell,
Where the ones who never paid you
 In eternal torment dwell!'
And lo! the doctor saw there
 His old patients by the score;
Then catching up a chair and fan:—
 'I wish for nothing more!
I'm content to sit and watch 'em
 As they sizzle, singe, and burn!
May I crank the spit a little,
 And give each another turn?'
Said the angel, 'Come on, doctor,
 There the pearly gates I see.'
But the doctor only murmured,
 'This is Heaven enough for me.'"

F. P. BELLINGER is at Council Bluffs, Ia., and in good practice. Writes that he has no kick coming, eats three to six meals a day, and enjoys life. Anticipates being here to-day, and will come loaded with Western experiences.

S. C. BURTON is at Pittsfield, Mass. After graduation he remained for three years with Dr. Swinburne. Then, after his first marriage in 1883, undertook practice at Syracuse, but after two months located permanently at Pittsfield. He is well fixed professionally, socially and financially; member of leading medical societies; and among other offices has been health officer, jail physician and surgeon, and civil service examiner. Father of two sons. Grandfather. Excellent health. No fault to find with him, except that he has failed to send in a detailed sketch.

DANIEL F. DONOGHUE, Holyoke, Mass., where he opened an office soon after graduating, and where he has been successful in practice ever since. He married Miss Katharine F. Glennon of Dalton, Mass., in 1891, and she still graces his lovely home on Maple street. They have no children. He does not write much about himself, except to modestly mention that he was on the school board eight years, and city physician for six; but among the physicians of the Connecticut Valley no one is in better standing or more highly honored by profession and laity alike.

ALBERT C. GRIFFIN is pleasantly located at Whitestone, N. Y., where he is enjoying practice, and is financially prosperous. Unfortunately he has not furnished a sketch of his career.

WILLIAM B. MADISON is at Hebron, N. Y., his native place, and where he began practice at once, succeeding his father, Dr. J. H. Madison, who had practised there for fifty years. Does a general practice; no specialty. Active in membership in county medical society.

GEORGE S. MUNSON, 30 Eagle Street, Albany. Taking up the practice of his brother, who had recently died, his specialty is treatment of diseases of the eye and ear. After graduation he took a special course at Dr. Knapp's Institute in New York, where, after six months he became first assistant. In 1882 he established his office here. October 7, 1885 he married Miss May Sophia Downing, who for nearly thirty years was the light of his home, dying August 14, 1914. They have had two children, a son, Louis Lee, dying in 1891 at the age of six, and a daughter, Beth D., the wife of Fred. B. Harris, to whom a daughter was born March 14, 1920. Dr. Munson has filled important positions on the hospital staffs, and has a large and lucrative private practice. He has contributed extensively to the literature of his specialty, and is adept at doing good. He is a member of the Fort Orange Club, a republican and a Presbyterian.

JOHN A. MOORE resides in Millerton, Dutchess County, (that county that knows so little about the H. C. L.), until 1918, when he removed to Westport, Conn. He is silent about his life work, but is a member of the State Board of Health, and in a fine practice.

MEYER L. RHEIN is at 38 W. 61st Street, New York. After graduation he took the dentistry course at University of Pennsylvania, graduating in '81. Has practised in New York ever since, as dentist. Has lectured on dental pathology twenty-five years. Written over seventy dental brochures. Originated many methods in dentistry, developing a fine technique, universally accepted. Married Miss Lysbeth Van Wyck Odell in 1888. Has two daughters, both married to commanders in the navy. Active in practice, highly reputed, good health, plays golf. Introduecd the prophylactic tooth brush and tooth powder. Authority on mouth hygiene. Member several medical and dental societies.

M. H. Simmons is at Oak Hill, N. Y. Began practice in a New York village, but after a year removed to Oak Hill, where he remained until 1888, when he located at Orange, N. J., and there practised thirty years. In 1918 he returned to Oak Hill. Confines himself mostly to office practice. In Orange he was member of the city council one term, city physician two years, county physician twelve years, surgeon for the public service corporation about fourteen years, visiting physician to St. Mary's Hospital, member of state and county medical societies, Orange Practitioners' Society, and Wm. Pierson Medical Library Association. Married Miss Hattie L. Shipley in 1881. Has one son, Dr. Albert Vanderveer Simmons, practising in South Orange, N. J. Sends his photograph. Hopes to be present to-day.

M. H. Strope, Poestenkill, N. Y. Began practice at West Sand Lake, N. Y. Celebrated his first anniversary by taking Miss Tillie Effler as bride. Has no children. In 1882 removed to Poestenkill, where he has enjoyed an extended and very extensive practice. Two years ago his health failed from a severe attack of sciatica, complicating influenza, and he remains in indifferent health. He has been town health officer thirty-four years and served two terms, six years, as coroner of Rensselaer County.

W. H. Turner is at Ione, Arkansas, having wandered farther than any other member. It is to be regretted that he has not communicated with us, as his experiences would be of the largest interest.

S. E. Ullman is at 167 W. 85th Street, New York. He is reticent about giving an account of himself further than that he is fat and bald. Writes that if unable to be here to-day, will send a sketch of his life. As it has not been received, we expect him. As he is interested in high class digestive ferments, if he is here it might be well to get in touch with him before the banquet.

C. E. Weidman is at Marcellus, Onondaga Co., N. Y. In the eternal fitness of things it is appropriate that one who as a student was of a classical nature should make his home in a classical town. He fails to give particulars, but an A. M. C. graduate in a town named for Augustus Caesar's adopted son must be successful.

W. C. Wood is at 64 East Fulton Street, Gloversville. He is reticent of telling how he fares, but the good people of the glove city assure us that he is hand in glove with prosperity, skillful in medicine and surgery, and honored and respected as a physician, citizen and Christian gentleman.

E. S. Willard, Watertown, N. Y. Has not furnished any sketch of his life, but as is well known here in Albany, among the excellent physicians of Jefferson County he is of the highest standing. The college and the profession of the State are honored by such a practitioner, and it is to be regretted that he has not spoken to us for himself.

C. F. Wicker is at Saranac Lake, and writes that he discovered that place in 1880, and has been there ever since. In 1910 he wrote that he kept one dog; now writes that he has two, and sends their photograph instead of his own, in a breezy letter. Is well and contented. Good practice. Intends to be here to-day, when he will have some things of interest to say about lung specialists, their trust, the High Lights, medical advertising, overworked undertakers, and hot air. Does not say much about himself, but evidently Providence and the dear public have been good to him.

W. H. Morse is at Hartford, Ct. He graduated to accept a position as a missionary physician in Turkey. Was given letters of introduction abroad by Dr. Vanderveer and Dr. Tucker. His health failing, he was obliged to forego his appointment, and after a rest of several months in New Hampshire, he opened an office in New York, and has been registered there ever since, specializing to some extent. In 1896 he was elected secretary of the auxiliary of the American Bible Society, holding that office until 1905, when he went to Hartford as superintendent of the Bible Mission work, in which he still continues. Is in practice, and maintains the Rose Memorial dispensary. Was married in 1880 to Miss Linnie C. Knox. Has one child, a daughter.

Respectfully submitted,
W. H. Morse,
Historian, Class of 1880.

A HISTORY OF THE PROFESSIONAL LIFE OF THE MEMBERS OF THE CLASS OF 1890, ALBANY MEDICAL COLLEGE.

Compiled by Ichabod T. Sutton, M. D.

Will Augustine Alexander, 308 Summit Avenue, Schenectady, N. Y. After graduating in 1890, practiced medicine and surgery in Albany until 1898. Married Mary E. Stevens of Schenectady in 1896 and has one son, Walter Livingston Stevens Alexander. In 1898 moved to Schenectady where he has practiced up to the present time.

Horatio S. Ansley, M. D. Not located.

Robert Brittain, M. D., Downsville, N. Y. After graduating roved for three years, striving to get righted from nervousness produced by la grippe in winter of 1889-'90. September 1894, located at Shavertown, Delaware Co., N. Y. One-half hour after his arrival was called to see his first patient and from that time until the present has never wanted for work. In 1895 was married to a Delaware County girl. She has proved a goodly mother, and helpmate of the highest order. August, 1896, moved to his present location, Downsville, whence he has traveled hill and dale for many miles around. Success as a physician has certainly followed him. Financially the accumulation has not been very much in excess of expenses, still he owns a good comfortable home in a pleasant, prosperous village of about seven hundred inhabitants. His family consists of four boys, one of whom is in Cornell. He intends studying medicine. Has one daughter. His Alma Mater always appeals to him.

Alfred R. Brundage, M. D., Chicago, Illinois. Died, July 20, 1914, aged 54.

Frank M. Clement, M. D., 9740 Vanderpoel Avenue, Chicago, Illinois.

William Sylvester Cobb, M. D., Corning, N. Y. W. S. Cobb (do you remember him as our Class Marshall?) came to Corning, N. Y., soon after graduation and ever since has been known as one of the leading physicians of the Southern Tier. He is a member and former president of the Steuben County, Medical Society, the Elmira Academy of Medicine and also of the New York State Medical Association. His was also the honor of serving the community as Health Officer for three terms and he also has served as a member of the local Board of Health for a number of years. When our country was drawn into the late war, Dr. Cobb was among the very first to volunteer his services and performed his duty as it was presented to him. Throughout his career he has been noted for his conservatism toward radical ideas but for aggressiveness when so indicated. Though now a "Grandad" he still possesses the enthusiasm of youth and is a shining example of his own therapeutic ideas concerning health.

Edmund B. Colburn, M. D., New York City. Died August 10, 1911, age, 43.

Edward V. Colbert, M. D., 4 Kenmore Place, Albany, N. Y. "These histories read at class reunions are quite dozy and uninteresting in general. I have been located in Albany since 1892 and meeting all comers."

Clement S. Crosby, M. D., East Nassau, N. Y.

Frederick Crounse, M. D., Altamont, N. Y.

Charles DeLaMontayne, M. D., Port Ewen, New York. Died July 23, 1899, age, 33.

John E. DeMund, M. D., 1740 Cropsey Avenue, Brooklyn, N. Y.

Melville D. Dickinson, M. D., 1937 5th Avenue, Troy, N. Y. Has been located at Troy, N. Y., since graduation. Is the gynecological surgeon at the Troy Hospital, and at present president of the Hospital Staff. For years has held some public health position, varying from city physician to assistant state medical inspector of schools. At present is the health officer of the city of Troy.

James F. Early, M. D., Albany, N. Y. Died November 26, 1896.

Thomas H. Flynn, M. D., Somerville, New Jersey.

John P. Gilligan, M. D., O'Neill, Nebraska: "I am in possession of yours of May 20, and it was a pleasure to hear from any of the boys of 1890. You should not ask a reply at my earliest convenience but as a matter of duty I owe other members of the class. If you remember I was very ill from La Grippe and its complications the year we graduated and Dr. J. M. Bigelow advised me not to remain in the east but to go south or west. The winter of 1890-'91 I took lectures all winter in New York City and came to Nebraska the following winter where I have since remained, being too busy to go elsewhere. There is a lure to the west and I love 300 days of sunshine every year. Five years after coming here I weighed in excess of two hundred pounds and have ever since.

"My first years here were stirring ones. Vigilance committees were the order of the day then, lynchings numerous. I helped to end that business for all time. I have served in our State Senate, have been president of the Nebraska State Medical Association, of the Elkhorn Valley Medical Society, Member of the Missouri Valley Medical Society, A. M. A., etc. Am Vice President of the O'Neill National Bank, Member of our School Board for 16 years, President of our local Carnegie Library Board, and a member of the great rank and file who works for a living. I served from June 20, 1917 to the end of the war on the Selective Service Board for Holt County, Nebraska, and did the examining. This was done as a duty and without compensation.

"In 1897 I married Maude E. Stout, to which union are two sons and one daughter, John Philip, Jr., who finishes his third year in the Nebraska State University in a few days, Bennett Stout, who finishes his eighth grade, and Miriam who finishes the High School in June.

"Extend my best wishes to all the boys of 1890, or those I know in any other class, and let me hear from you also. Will try and go back for June 15 if I can get away, but of course 1,700 miles takes more or less time to negotiate.

"Should I miss out I wish the boys would write so I can get in touch with the ones who are living. I hope many will be there and give my love to every one of them."

John A. Hager, M. D., Gloversville, N. Y. Died March 6, 1918.

Frank M. Hall, M. D., Hartford, N. Y. Died February 26, 1893.

William H. Happel, M. D., 182 State Street, Albany, N. Y.

Thomas Helme, M. D., Western Turnpike, Albany, N. Y.

John Houghton, M. D. Not located.

John W. Kniskern, M. D., Amsterdam, N. Y. Died February 1, 1911.

Michael J. Lawler, M. D., Carthage, N. Y.

George G. Lewis, M. D., 600 University Block, Syracuse, N. Y.

Robert S. Lindsay, M. D., Old Forge, N. Y.

Frederick W. Loughran, M. D., 84 Fourth Avenue, New York City.

James H. Lyons, M. D., 569 Second Avenue, Troy, N. Y.

John J. Lyons, M. D., 569 Second Avenue, Troy, N. Y.

Seth A. Mereness, M. D., Milford, N. Y.

George T. Mosten, M. D., North Creek, N. Y.: "After graduating in 1890, I located in Albany where I practiced twenty years. In the spring of 1910, my health becoming badly impaired, I bought a farm in the town of Chester, Warren County, where I still reside summers. Plenty of hard physical work has done me good but I could not stand the strain of active practice. My sign is not out. I make no calls except in consultation, but have a fair office practice as people are determined to consult me professionally. My oldest son, aged 23, died in service at Fort Warren, Massachusetts. He was taken sick with influenza the day before he was to have started for overseas duty. He was a graduate of Union College. My other son, who will be fourteen in June, is attending High School in Albany.

Walter G. Murphy, M. D., 75 Pratt Street, Hartford, Conn.: "According to your request I am sending you a history of my professional life since leaving the Medical School thirty years ago.

"I really finished my college course in 1889 but was too young to receive my diploma until the following year. I was fortunate in receiving the second appointment as interne at the Albany Hospital beginning my service October, 1889. While waiting for the appointment was interne at the Hudson River State Hospital, Poughkeepsie. After completing my service at the Albany Hospital, located at North Granby, Connecticut, where I did a general country practice seven miles from a railroad for three years and then moved to East Hartford, Connecticut. I practiced in East Hartford fifteen years and while there became interested in pediatrics and did post-graduate work in Boston, New York, London and Edinburgh. In 1912 I gave up general practice and moved to Hartford, Connecticut, and have limited my practice to children. I am on the staff of the Hartford Hospital and have done considerable welfare and relief station work.

"In January, 1918, I was sent to France by the American Red Cross and served in welfare and relief until November.

"In 1892 I was married to Miss Henrietta Boughton, of Salem, N. Y. We have three daughters; the oldest is married and I am a grandfather.

"This outline represents the accomplishments of thirty years. Not much to be sure but what it is I am very largely indebted to the example and interest of the teachers of the college and whose influence was an inspiration."

Arthur G. Root, M. D., 218 State Street, Albany, N. Y.

Edgar Simpkins, M. D., Middleburgh, N. Y.

Minot A. Steele, M. D., Portsmouth, R. I. Died February 17, 1913. Age, 45.

John J. Sullivan, M. D., Passaic, N. J. Died December 1, 1917. Age, 53.

Ichabod T. Sutton, M. D.: "I located, June 1, 1890, in the town of Prattsville, New York, where I have been slaving ever since, practicing both medicine and surgery. I was married in 1892 and have four boys; one in the hardware business, one in the Albany Medical College, one at home, and one away in High School."

James H. Tobin, M. D., Pittsfield, Mass. Died June 6, 1918. Aged, 50.

HISTORY OF THE CLASS OF 1900.

Dr. K. A. **Campbell** is practicing in Hopedale, Mass., where he started in practice after graduation.

Dr. **Luther Emerick** is still in Saugerties, N. Y. Has not specialized, but is doing general practice.

I have written to George P. Coopernail, John L. Crofts, William E. Curitss, W. G. Mack, Samuel D. Miller, William H. Petrie, William W. Sanford and Arthur A. Will, but have received no answer.

Emerick, Lenz, Campbell, Humphrey, La Moure and Gilmore attended the twentieth reunion in June, 1920.

R. Gilmore,
Historian, Class of 1900.

Dr. **Peter McPartlon** is still in Schenectady and has specialized in tuberculosis work. He is Superintendent of Glennridge Sanatarium, the County Tuberculosis hospital.

Dr. W. A. **Stearns** volunteered in the U. S. Army during the war. After his discharge he gave up the practice of medicine for farming.

Dr. L. K. **Dugan** is still in Schenectady, doing a general practice.

Dr. R. **Gilmore** is still doing a general practice in Schenectady.

Dr. **George Lenz**, 68 Bleecker Street, Gloversville, N. Y.: "After graduating I came back to my home town and started practicing at once. I did general work for the first three years, then began to do more surgery and have gradually given up general practice confining myself mostly to this special work. Have taken several post graduate courses in New York and Philadelphia.

"In 1902 I married Miss Grant of Ingwooll, Canada, and have a well grown family of one daughter and three sons. Have enjoyed my work immensely and have gotten much out of life and will be happy to see the boys on June 15."

Dr. **Louis F. O'Neill**, Auburn, N. Y.: "I am pleased to hear from you in reference to a reunion of our class for our twentieth anniversary and hope we may have a large number of our fellows in attendance. I will do my best to be among those present.

"In reference to the autobiography you speak of, any of those who may be unable to be present may satisfy themselves by consulting the current issues of "Who is Who" and those who may attend will hear enough when we are all properly placed around some festive board if there be any such still indigenous."

L. H. **Humphrey**, M. D., Silver Springs, N. Y.: "Soon after graduation I located at Silver Springs, N. Y., and have been here ever since doing a general practice. I have been busy most of the time and the years have slipped by without my scarcely realizing it. I can hardly believe that it is twenty years since were were all here together at the Albany Medical College.

"In 1901 I married Miss Martha M. Barber, of Warsaw, N. Y. Two children were born to us, Mary who is to graduate from high school this year, and Robert who is twelve is still in the grades. In 1911 my wife died very suddenly and in 1912 I married Harriet S. Barber a sister of my first wife.

"In 1903 I was appointed U. S. Pension Examining Surgeon and held that position about ten years. I have been one of the coroners of the county for the past four terms. In 1908 I was appointed surgeon for the Buffalo, Rochester & Pittsburgh Railway Company, which position I still hold. Am also a director of the Silver Springs National Bank.

"When we went into war with Germany I tried for a commission but was twice rejected for physical disabilities, much to my disappointment. However I stayed at home and did the work of two men, so feel that I did my bit even though I could not pass the physical requirements for a commission.

"There is not much more to tell and what remains will try to tell you all personally when I see you at the class reunion."

Dr. H. A. **LaMoure**, Colorado State Hospital, Pueblo, Col.: "If nothing unforeseen turns up I expect to be with the class of 1900 on June 15th. As I have not kept up my membership in the Alumni will it be possible for me to get in and on what terms?

"As regards a history I believe I furnished you with one up to 1910, at which time I was Superintendent of the North Dakota Institution for Feeble Minded at Grafton, N. D. In December, 1910, I left there and went out to the State of Washington with the idea of attempting private practice, but after procuring a license I received an offer of the Assistant Superintendency of the Colorado State Hospital and could not resist the chance to return to institution life. On April 1, 1912, was made Acting Superintendent and on January 1, 1913, Superintendent. Have an institution of something over 1,900 patients, an increase of over 600 since I came here. While at times the work is rather discouraging still on the whole I have nothing to complain of."

Dr. J. J. **Gallup**, 549 Washington Avenue, Albany, N. Y.: "I am in receipt of yours of the 21st, advising me that there will be a reunion of our class on June 15th of this year and this is to advise you that I will be with the class for our reunion on that day.

"In regard to a little history of my success, etc., since graduation the year of 1900, I beg to advise that as you will note I am not in the practice of medicine. After graduation I spent two years with Dr. James Moore, Madison Avenue, Albany, N. Y., after which time I had a breakdown in health and was compelled to go north, being advised by physicians to get something that would be entirely outdoors at all times. I took up a commercial life, spending about eight years with the National Biscuit Co., and six years with the Loose-Wiles Biscuit Co., with which I am now connected, holding position of Sales Manager of the Albany Agency, taking in the whole Capitol District.

"Although not being professionally connected with the medical profession I still have an interest in the class of 1900 and will endeavor to be with my classmates on that day."

Dr. THOMAS H. CUNNINGHAM, Glens Falls, N. Y.: "I can't tell you definitely just now whether or not I shall be able to get to Albany for Alumni day but you may be sure I shall make it if possible. Did we not celebrate the tenth anniversary with the class of 1901 and why are we not going to do the same thing this year?

"As to my professional life. After graduation I secured a two-year appointment at the Albany Hospital on the Interne Staff. Following this I was appointed assistant surgeon at the Soldiers' and Sailors Hospital, at Bath, N. Y., and I remained there for about fifteen months. When I left there I located in Glens Falls and have been here since. My practice is limited to surgery and I have been attending surgeon to the Glens Falls Hospital for about thirteen years. I have done post-graduate work at Hopkins and in New York and I have made occasional visits to all the principal surgical clinics of this country and abroad. I am a Fellow of the American College of Surgeons and am not married."

F. D. BIGAREL, M. D., Fort Leyden, N. Y.: "I am still located where I first began practice. I have about one hundred square miles of territory to cover as health officer; have 24 schools to inspect with my other work. Have held some educational and political offices.

"My work is that of the average doctor located in a village of 800 population, a large part of the time without any other practitioner.

"I should like very much to be present at the Alumni meeting and meet as many of my old classmates as possible. Can make no promise but will come if I can."

Dr. E. A. SWEET, Surgeon, Chief Quarantine Officer, Hawaiian Islands, Honolulu: "May I, through you, express to the members of the class my heartiest greetings? Memories of the old days still creep back occasionally. Only the other day I picked up a Gray's Anatomy, with the date 1897 on the title cover, a book which has followed me many a mile in my travels, as the government pays the freight. It has been partially devoured by ants in Texas, the boll-weevil in Georgia, flying roaches in Mississippi, and beetles in Hawaii, to say nothing of other vermin throughout the United States. Believe it or not, I could still detect the odor of that Albany amphitheatre at half past eleven almost any morning, on that book. And that reminds me of the time when Dr. G. Willis Tucker, lecturing on carbon dioxide, informed us that a content (you will recall how he enunciated his words) of more than 4 parts per 10,000 in the air, was deleterious to health, exhibiting simultaneously to the class a simple pocket apparatus for its determination. After squirting in the air and giving the thing a few shakes, with all the skill and dexterity coming from continued practice (in those days) he squinted his eye across the glass and announced, without the turn of a hair, that 13 parts per 10,000 were present. Only one man, Parson Miller, who was more or less accustomed to giving some attention to ventilation in order to keep his congregation from snoozing off, so much as looked at a window.

"The books tell us that when a man begins to reminisce in this manner it is a sign his dotage is upon him. Doubtless this is true. On the occasion of our twentieth anniversary I trust that all the boys will become, for the day at least, tottering dotards. I only wish it were possible for me to join the ranks but I am not even sure this letter will have arrived on the day in question."

At the conclusion of the reading of the Class histories Dr. Emerick presented the report of the Nominating Committee. The report presented Dr. Thomas W. Salmon for election as president of the Association. Dr. Salmon called the Recording Secretary to the Chair, asked that he be excused from further service, as, for personal reasons, he doubted the expediency of the selection. He moved that the name proposed for first vice-president, that of Dr. Walter H. Conley ('91) be substituted for that of Dr. Thomas W. Salmon in the report of the Committe. The motion was put by the Recording Secretary and carried. The amended report of the Committee was then before the Association for action, and on motion of Dr. Marcus A. Curry ('04) the report was accepted and adopted, and the Recording Secretary was instructed to cast one ballot for the officers proposed by the Committee. The Recording Secretary cast the ballot, and President Salmon announced as duly elected the

OFFICERS FOR THE YEAR

PRESIDENT: Dr. WALTER H. CONLEY, ('91), New York City.

VICE-PRESIDENTS:

Dr. J. WILSON POUCHER ('83), Poughkeepsie, N. Y.
Dr. L. HAYDEN HUMPHREY ('00), Silver Springs, N. Y.
Dr. PAUL V. WINSLOW ('08), New York City.
Dr. GEORGE S. MUNSON ('80), Albany, N. Y.

RECORDING SECRETARY, Dr. J. MONTGOMERY MOSHER ('89), Albany, N. Y.

CORRESPONDING SECRETARY, Dr. CLINTON B. HAWN ('06), Albany, N. Y.

Treasurer, Dr. Robert Babcock ('84), Albany, N. Y.
Historian, Dr. Arthur J. Bedell ('01), Albany, N. Y.
Executive Committee (Term expries 1923):
  Dr. Charles G. McMullin ('98), Schenectady, N. Y.
  Dr. George E. Beilby ('99), Albany, N. Y.
  Dr. William G. Lewi ('92), Albany, N. Y.
  Dr. Eugene E. Hinman ('99), Albany, N. Y.

There appearing no other business the Association proceeded for luncheon to the club room of the order of Elks.

The Alumni Luncheon

The alumni luncheon was held at the Elks' Club. The trustees were represented by Mr. Edmund N. Huyck, President of the Board.

President Salmon called upon President Huyck who gave some account of the stewardship and difficulties of the Board of Trustees,and made the following definite statement of the condition and prospects of the College:

Mr. Huyck's Address

Five years ago when the Trustees of the Albany Medical College undertook its reorganization, they had very definite ideas as to what must be done if the School was to continue and to meet the demands of modern medical education. Specific lines had been laid down by the Carnegie Foundation after the inspection of medical schools by Dr. Abraham Flexner, and, unofficial though this was, the Trustees realized if the Albany Medical College was to continue its existence it must conform to certain standards which had been established for Medical Education throughout the country.

As the first step, it was at once evident that the Albany Medical College could not be successful unless it became definitely the medical department of Union University. To bring this about, the educational direction of the College was placed in the hands of an Executive Committee of the Board of Trustees of thirteen members, nine of whom were also members of the Board of Governors of Union University. The Chancellor of the University is a member of this Committee and the entire educational policy is in its hands. Working with this Committee are special educational committees from the Trustees and Faculty associated with similar committees of Union on the subject of pre-medical courses.

To accomplish this reorganization instead of the students' fee being sufficient to cover the cost of education, the Trustees knew that a very substantial amount of money would be needed each year. Four men guaranteed a sum of ten thousand dollars, which, later, another, member of the Board made the same guarantee. Ten thousand dollars was at the time in the Treasurer's hand available for running expenses and additional subscriptions during the five years have increased the amount to about seventy-five thousand dollars.

The five year period is over and three of the guarantors, Mr. James C. Farrell, Mr. J. Townsend Lansing and Mr. Dudley Olcott, have died and it would not be possible, were it deemed advisable, to continue the School under the plan of a guaranty which was recognized by all of the members of the Board as temporary and for the sake of experiment only.

The experiment was to consist of a demonstration of the correctness of the ideals presented by Dr. Ordway when, at the request of the Board of Trustees, he first came to Albany to advise them about the School. He believed that in a small school with a limited number of students and laboratory branches in charge of full time men of experience and ability and with a clinical teaching staff with the highest ideals of voluntary service a thorough medical education could be given at a smaller cost then in most of the large Universities. The Trustees feel that this has been thoroughly proven in the five years now past. In the New York State examinations, there have been no failures for the past two years of men who have graduated since 1915. The State of Pennsylvania has voluntarily inspected the School and reinstated the students of the Albany Medical College as eligible to take the State examinations.

It has cost about four hundred and fifty dollars a year for each student in the Albany Medical College as compared with costs of from eleven hundred to three thousand dollars in the large universities.

The experimental period is past and the Trustees are facing the future with the belief that they are fully justified in arranging for the permanent financing of the College. No effort to this end was made until the past year and the time has been too short to complete the work. We feel that the start which has been made, however, is most encouraging. There has been no general appeal but from a comparatively few friends of the School who have been approached, and a single legacy of ten thousand dollars from Mr. J. Townsend Lansing, a sum of $156,250.00 has been subscribed toward a permanent Endowment, the interest of the entire sum being available for the running expenses of the coming year.

The General Electric Company in recognition of the services of the Albany Medical College in the departments of Industrial Medicine, Radiology and various branches of their Research Laboratories have subscribed five thousand dollars a year for the next two years with the assurance on the part of the officers that this subscription will be permanent so long as the service is rendered and with the belief expressed by them that the service will be of greater value.

In addition to this sum of $156,250.00, there have been other gifts to the Endowment Fund. Thirty thousand dollars was given by the late Dr. R. M. Fuller for scholarships for students of the Albany Medical College who have excelled in chemistry in the pre-medical course at Union College. The building fund from various sources amounts to about twenty-nine thousand dollars and the Willis McDonald Memorial Fund to about twenty-two thousand dollars, so that the total amount already available for the new College Buildings is something over fifty thousand dollars at the present time.

A request has also been made to the General Education Board for permanent assistance and Dr. Abram Flexner hoped to be able to make an inspection of the School before the end of the year. He found, however, that this was a physical impossibility and that, as in several other cases, it was necessary to delay this inspection until a later date. Realizing, however, that as the Albany Medical College needed assistance for the coming year, the General Education Board made a single exception of this institution and passed a resolution granting ten thousand dollars for the year. They knew, from facts that had been presented to them, this amount, in addition to what had already been secured, would be sufficient to give the School ample funds for the year, and the grant was made with a definite promise that in the fall Dr. Flexner will make an inspection with a view toward definite and permanent help in financing. The decision of the General Education Board will depend on three factors: quality of teaching, the service that is being rendered to Albany, Troy, Schenectady and other cities in the Northeastern part of New York State and Western New England and the possibility of support from the people of the cities which are benefited and who ought to be interested in the School. The Trustees have the greatest confidence in being able to convince the General Education Board on all of these questions. They know the quality of the education that is being given and the service that is being rendered to all of the cities, and have been promised further substantial support from the friends of the School.

We feel the greatest possible credit is due to Dr. Ordway for his remarkable financial management of the School. When he came to Albany, he told the Trustees that in his belief the School could be conducted on a budget of thirty-five thousand dollars the first year which later should be increased to fifty thousand dollars during the five years. At the beginning of each year, he has presented to the Trustees a budget for the year and in no case have the expenses for the year varied from this budget more than two or three hundred dollars. With the exception of one year when permanent equipment made necessary the extending of the amount which made the total expenses forty-one thousand, the budget for each year has been about thirty-five thousand dollars.

The teachers of the laboratory departments, as well as the clinical departments, have shown a loyalty that should be recognized by all friends of the School. The laboratory men have refused offers of larger salaries from other institutions because of their belief in the soundness of the experiment that is being tried and their desire to see it worked out to a successful conclusion.

We believe the future of the School is assured and that it will go on year after year performing a more important service in medical education. The Trustees want your support and co-operation and that of all the Alumni. The success of the School will be greater with the growth of your co-operation. The future of the School means more to the body of Alumni than to any one else, more to their sons who may be coming on to study medicine after them, more to the communities in which they live and the Trustees feel that they have a right to ask that any difference of opinion existing in the past should be forgotten and that all shall work together for the institution toward which the Trustees have given not only their money but their efforts to the end that it may become, as we believe it will, the medical department of a great University.

The Association then went by automobile to the Colonie Country Club for an afternoon outing and social relaxation proceeding the

Annual Alumni Dinner

The annual dinner of the Association was held at the Colonie Country Club on Tuesday evening June 8th. President Salmon presided at the speaker's table, and with him were the guests of the evening, Dr. Victor G. Heiser of the Rockefeller Foundation, the Reverend Roelif H. Brooks, and Mr. Edmund N. Huyck, President of the College. Professor Elting responded to the toast to the Faculty, Dr. Wardner G. Ayer gave a short resume of the activities of the Class of 1910, and Dr. John Albert Keck of the graduating class made a witty response to the call upon him to represent his associates. Dr. Heiser gave the address of the evening on " American Sanitation in the Philippines and its Influence on the Orient."

Commencement Exercises

The eighty-ninth commencement exercises of the Albany Medical College were combined with the one hundred and twenty-third commencement of Union College and were held at the First Presbyterian Church, Schenectady, N. Y., on Monday, June 14, 1920, at ten o'clock.

The graduating exercises were opened by singing the 117th Psalm, followed by a prayer. The Albany Medical College trustees, faculty and students formed part of the procession from the campus to the church. The Honorary Chancellor's Address was delivered by M. Jules Jusserand, French Ambassador to the United States.

The degrees were conferred by the Rev. Dr. Charles A. Richmond, Chancellor of the University. The following named candidates for the degree of Doctor of Medicine were presented by Dean Ordway, representing the Faculty:

Douglas Anderson Calhoun	Watervliet
Bernard Roger Coleman	Green Island
Joseph Cornell	Scotia
Lawrence James Dailey	Gloversville
Percy Lawrence DeNoyelles	Jersey City, N. J.
Alfred Herman Duerschner	Troy
William Lawrence Gould	Albany
Lawrence Daniel Greene	Petersburg
Albert Leonard Hayes	Hoosick Falls
Leland Earl Hinsie	Schenectady
John Albert Kelk	Brooklyn
Frederick Burton MacNaughton	Troy
Harold Edwin Marden, A.B	Troy
Thomas Sylvester Mooney	Cohoes
Thomas William Phelan	Troy
Walter Fred Preusser	Albany
William George Richtmyer	Albany
Anton Schwartz Schneider, B.S., M.A	Albany
Homer L. Stephens, B.S	Gardiner
Reginald Van Woert	Athens
Asher Yaguda	Albany

The commencement procession, a time-honored and impressive ceremonial, formed at half after nine o'clock. The Trustees and candidates for honorary degrees met at the President's House, the Faculty at Silliman Hall, the Undergraduates and Alumni, the younger classes preceding, and the graduating class at the College Chapel. The line of march was past Silliman Hall and the President's House to the church, where seats were reserved for those taking part in the procession.

Mr. Luther H. Tucker, Secretary of the Board of Trustees, announced the award of prizes:

The Vander Poel Prize, endowed by Mrs. Gertrude W. Vander Poel, in memory of her husband, the late S. Oakley Vander Poel, for many years a professor in the College, consisting of a clinical microscope and accessories, offered to the senior student passing the best bedside examination in general medicine, was awarded to Dr. Harold E. Marden.

The prize, consisting of an ophthalmoscope, offered by Dr. Merrill for the highest standing during the year in ophthalmology and otology, was awarded to Mr. Charles E. Allen. Mr. Lynden A. Hulbert, honorable mention.

The Townsend Physiology Prize, endowed by the late Professor Franklin Townsend, Jr., M. D., was awarded to Mr. Samuel W. Eberfeld, for passing the best examination in physiology at the end of the first year of study. Mr. Nitya Pauredya received honorable mention.

Dr. Boyd's Prize to the senior student having the highest standing during the year in obstetrics was awarded to Dr. Lawrence D. Greene.

The Daggett Prize, consisting of sixty dollars, for the best "anatomical specimens," was awarded to Messrs. Louis S. Poskanzer and Joseph R. Gingold, and the second Daggett Prize, amounting to thirty dollars, was awarded to Mr. Charles E. Allen, with honorable mention of Mr. Lynden A. Hulbert.

The Daggett first prize for the best "deportment irrespective of scholarship," consisting of sixty dollars, was awarded to Dr. P. Lawrence DeNoyelles. and the second prize, consisting of thirty dollars, was awarded to Dr. Reginald Van Woert.

The Bigelow Prize, endowed by the late Professor John M. Bigelow, M. D., consisting of eighty dollars, offered to the senior student passing the best examination in diseases of the nose and throat, was awarded to Dr. Thomas W. Phelan.

The exercises concluded with the "Ode to Old Union" and the benediction pronounced by the Chancellor.

Public Health

Edited by Arthur Sautter, M. D.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

BUREAU OF VITAL STATISTICS.

DEATHS FOR MONTH OF NOVEMBER, 1920.

Tuberculosis	13	Grippe	1
Typhoid Fever	0	Bright's Disease	12
Diphtheria	1	Apoplexy	7
Scarlet Fever	1	Cancer	16
Whooping Cough	0	Accidents and Violence	3
Measles	0	Deaths under one year	8
Diarrheal Diseases	2	Deaths over 70 years	32
Pneumonia	2	Death rate	12.27
Broncho Pneumonia	5	Death rate less non-residents	10.37
Influenza	0		

Deaths in Institutions.

	Non-Res.	Res.		Res. Non-	Res.
Albany Hospital	7	6	St. Margaret's House	0	1
Albany Hospital T. S.	1	3	Public Places	0	1
Homeopathic Hospital	3	2			
St. Peter's Hospital	3	7		14	25
Albany County Hospital	0	2	Births		154
Maternity Hospital	0	2	Still births		3
Albany Hospital for Incurables	0	1			

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	6	Whooping-cough	71
Scarlet Fever	14	Tuberculosis	17
Diphtheria and Croup	19	Mumps	7
Chickenpox	11	Pneumonia	24
Smallpox	2	Influenza	1
Measles	44		
German Measles	1	Total	217

Number of days quarantine for scarlet fever:

Longest...... 30 Shortest...... 30 Average...... 30

Number of days quarantine for diphtheria:

Longest...... 33 Shortest...... 14 Average...... 23 5/11

Fumigations:

Rooms.................. 165 Buildings.................. 43

Milk bottles disinfected.................................. 603

Communicable Diseases in Relation to Schools.

	Reported		
	D.	S.F.	M.
Public School No. 1	..	..	1
Public School No. 2	1	..	..
Public School No. 7	2	..	..
Public School No. 17	1	..	3
Public School No. 18	..	4	..
Public School No. 19	1	1	..
Public School No. 24	..	1	3
St. John's School	..	..	2
Miss Quinn's School	..	..	2
St. Joseph's Academy	1	..	..
Cathedral School	..	..	3
St. Vincent De Paul's School	..	..	16

MISCELLANEOUS.

Cards posted for communicable disease	58	Vaccination dressings	189
Cards removed	22	Children examined for employment certificates	30
Notices served on schools	171	Number of employment certificates issued	28
Notices served on stores and factories	9	Taking specimens of blood for Wassermanns	1
Postal card returns sent to doctors	58	Taking smears for Gonococci	0
Postal card returns received from doctors	22	Postal cards sent to milk dealers	45
Inspections and reinspections	60	Dogs examined for rabies.	1
Vaccinations	28		

Tuberculosis.

Living cases on record November 1, 1920		649
Cases reported:		
By Card	10	
Dead Cases by Certificate	7	17
		666
Dead Cases previously reported	6	
Dead Cases not previously reported	7	
Removed	36	
Died out of town	0	
Recovered	0	
Unaccounted for	0	49
Living cases on record December 1, 1920		617
Total Tuberculosis Death Certificates		13

Non-resident deaths:

Albany Hospital Camp	1	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	0	
City at large	0	
St. Peter's Hospital	1	
Albany Hospital	1	3
Resident deaths		10
Visits to cases of tuberculosis		182
Miscellaneous visits		18
Visits to physicians		18

LABORATORY REPORT.

Diphtheria.

Initial Positive	30	Release Negative	250
Initial Negative	336	Unsatisfactory	28
Release Positive	79		
		Total	723

Sputum for Tuberculosis.

Positive	30	Negative	122
		Total	152

Widals.

Positive	4	Unsatisfactory	4
Negative	20		
		Total	28

Meningococcus.

Positive	0	Negative	0
		Total	0

Wassermann tests (positive 50)	331	Gonorrhoea Examinations (positive 29)	82
Milk Analyses	178	Miscellaneous Examinations.	5
Water Analyses	0		
Pathological Examination	0	Total examinations	1,499

HEALTH PHYSICIANS' REPORT.

Cases assigned	48	Calls made	105

DIVISION OF SANITATION.

Complaints		58	Garbage collected from 1st District ....bbls.		195
Inspections		37	Garbage collected from 2nd District ....bbls.		195
Plumbing	13		Garbage collected from 3rd District ....bbls.		260
Sanitary	24				
Reinspections		40			
Plumbing	22				
Sanitary	18				

HEARINGS.

Hearings		1	Cases heard		1

Class of Cases.

Plumbing		1			

Disposition of Cases.

Reinspection		1	Abated		0

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections		105	Smoke	0	
Old Houses	59		Blue or red	12	
New Houses	46		Peppermint	3	
Permits issued		58	Water test	6	
Plumbing	45		Houses examined		20
Building	13		Re-examined		92
Plans submitted		5	Valid	12	
Old buildings	0		Without cause	8	
New buildings	5		Violations		0
Houses tested		21			

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	18	Cats removed	10
Dogs removed	10		
		Total	38
		Cases of eggs removed	65

DIVISION OF MARKETS AND MILK.

Public market inspections	20	Milk cans inspected	190
Market inspections	111	Milk cans condemned	0
Fish market inspections	19	Lactometer readings	100
Fish peddler inspections	0	Temperature readings	100
Slaughter house inspections	2	Fat tests	34
Rendering establishment inspections	0	Sediment tests	52
		Chemical tests	0
Pork packing house inspections	6	Cows examined	452
		Cows quarantined	3
Hide house inspections	0	Cows removed	5
Milk depots inspected	44	Complaints investigated	2
Stores inspected	34	Milk houses inspected	41
Dairies inspected	41		

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR DECEMBER, 1920.—Number of new cases this month, 222; classified economically—Free, 82; bed cases, 13; prenatal, 11; dispensary Soc. Service, 30; Tuberculosis (Pos.), 14; Tuberculosis Super, 0; Hospital Soc. Service, 6; Venereal Social, 8. Paid, 140; limited means, bed cases, 59; Metropolitan, bed cases, 59; Metropolitan prenatal, 14; industrial bed cases, 1; industrial social cases, 7; Western Union, 0. Cases carried over from last month, 754; bed cases, 83; prenatal cases, 23; dispensary social serv., 2; tuberculosis (total), 483; hospital soc. service, 22; venereal, 141; industrial, 0; Western Union, 0. Classification of bed cases: Medical, 89; surgical, 7; obstetrical, 30; prenatal, 25; confinements, 27; maternity, 2; miscarriages, 1. Number of babies born, 29.

Visits for Nurses (all departments), 1,683: For bed care, 1,036; prenatal instruction, 84; tuberculosis (sup. & inst.), 74; venereal dis. instr., 54; hospital soc. service, 62; general soc. service, 189; for other purposes, 140; dispensary social, 8; supervision, 36.

Source of Nursing Cases.—Metropolitan agts., 57; doctors, 68; nurses, 2; dispensary, 1; family or friends, 19; other sources, 9.

Disposition of Bed Cases.—Discharged recovered, 28; improved, 56; unimproved, 15; dead, 4; to other care, 25; carried, 91. Disposition of other cases: Prenatal—discharged to maternity care, 35; to hospital, 5; to other care, 8; carried, 44. Dispensary social service—discharged to disp. care, 30; carried, 1. Hospital social service—discharged home, 6; dead, 0; to dispensary, 2; to Pavilion F, 1; lost, 0; carried, 19. Venereal—discharged cured, 0; temporarily, 0; to other care, 4; carried by dispensary, 61; under super., 84; under care of the House of Good Shepherd, 0. Tuberculosis—discharged dead, 7; left town, 0; not T. B., 1; carried (positive), 546; (supervision), 0. Industrial—discharged (soc. or bed cases), 0; carried, 0. Total number of cases carried over into January, 755.

South End Dispensary Report.—Number of clinics, 91; surgical, 13; medical, 8; gynecological, 8; prenatal, 0; eye and ear, 17; venereal, 9; nerve, 4; nose and throat, 9; skin, 4; children, 8; lung, 4; children's lungs (observation clinic), 7. Clinics with doctor attending, 90; without doctor attending, 1. Number of new patients treated, 154; number of old patients treated, 615. Total number of patients, 769.

Industrial Dispensary, at Huyck's Mills.—Number of clinics held, 18; number of new cases treated, 5; number of old cases treated, 176; total number treated, 181; number of physical examinations, 1.

No industrial cases are really discharged, but we do not add them on to our cases carried nor do we add on the South End Dispensary cases as carried on our general report. They are kept separate.

(Signed) ELEANOR ARCHER, *Acting Supt.*

In Memoriam

THOMAS HELME, M. D.

Dr. THOMAS HELME, an alumnus of the Albany Medical College of the Class of 1890, died at the Homeopathic Hospital, in Albany, on January 4, 1921, aged fifty years.

Dr. Helme received his preliminary education in the Albany Academy, and began the study of medicine at once. The next day after receiving his degree he began active practice at McKownsville, near Albany, and remained there until the time of his death. He had been Health Officer of the Town of Guilderland for many years, and also served one term as Coroner's Physician for Albany County.

In September, 1890, Dr. Helme married Miss Carlotta M. Manville, who survives, with two sons and three daughters.

WILLIAM H. HAPPEL, M. D.

Dr. WILLIAM H. HAPPEL died at St. Peter's Hospital on the morning of December 10, 1920. Dr. Happel had had symptoms of diabetes for several years, but the final expression of the disease was acute, and his last illness was comparatively short. Dr. Happel was the son of Henry J. and Caroline H. Happel, and received his preliminary education in the Albany High School and at Fort Wayne, Ind. He graduated from the Albany Medical College with the Class of 1890, with a record of studiousness and intelligent appreciation of his work. After a term of service in the Albany Hospital he began general practice, and was soon practically overburdened with the extent of his work and the demands of his patients. After some fifteen years of this constant devotion to duty he made special study of X-ray, and became the radiographer for St. Peter's Hospital. He was a member of the County and State Medical Societies, of the University Club, and of the Knights Templar.

Dr. Happel married Miss Irene Shill of Ballston Spa, N. Y., whom he survived ten years. He leaves three children.

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ALBANY MEDICAL ANNALS

Original Communications

ANXIOUS THOUGHT: ITS RÔLE IN FUNCTIONAL DISEASE.

Read at a meeting of the Bradford County, Pa., Medical Society, September 14, 1920.

BY GEORGE E. GORHAM, M. D.,
Albany, N. Y.

In this paper an effort will be made to show that the chief etiological factor in many functional diseases is anxious thought, and to outline a method for its removal. By anxious thought is meant thought which stir the emotions unpleasantly, like fear, anger, hate, jealousy, grief, worry and the like.

In discussing the subject, dealing as we shall, with the effect of the emotions upon physiological processes, no attempt will be made to treat of psychology or physiology from the purely scientific standpoint. Arguments will be based upon, and deductions drawn from, such symptomatology as may be observed by the general practitioner in his daily work.

Scientific proof of the claim that anxious thought is an important etiological factor in functional disease may be had by reading Cannon's work on "Bodily Changes in Pain, Hunger, Fear and Rage."

For our purpose it will only be necessary to remember that we have in the human body the cerebrospinal nervous system, which works and operates the body at will, and the great sympathetic nervous system, which operates the subconscious processes—beats the heart, circulates the blood, digests the food, and carries on the whole process of growth, renewal and repair of the body. Every voluntary muscle in our bodies is under control of, and obeys the command of, conscious life, and is operated by will, through the cerebrospinal system. To illustrate: conscious life commands the muscles to place food in the mouth, masticate and swallow it. When the food passes to the stomach it is lost to consciousness, and immediately the subconscious processes, operated by the sympathetic nervous system, assume control and begin at once their work of converting the food into heat and energy, and material for growth and repair of the body. In the further discussion, this work of the subconscious life will be referred to as the vital processes.

These vital processes upon which the body depends for all its growth and repair are not under control of the will, and are seldom influenced by it; but they are profoundly affected by the emotional life. Fear inhibits. Faith stimulates. Cannon has shown that the gastric juice in a dog's stomach instantly ceases to flow when the dog is frightened during his meal, and that it resumes its flow as soon as the fear is removed. What is true of the gastric juice is true of every secreting gland in the body. For normal life and bodily vigor it is necessary that the heart beat normally, that the digestive fluids be poured out upon the ingested food, and that all the metabolic processes work steadily and harmoniously (without too much interference).

But what happens to this wonderful and complicated machine—the manufacturing and repairing plant of our bodies—when anxious thought suddenly enters the mind? Complete paralysis of the whole plant may occur, the heart cease its beat, the victim fall, pale, breathless and unconscious to the floor. Who has not seen this occur at the sight of blood, or during a simple vaccination? Who has not known rapid breathing, flushed face, and a heart to increase instantly its rate from 60 to 100 per minute under the influence of sudden anger? Who does not know that the sight and smell of vomitus may produce vomiting? It is not necessary to cite further illustrations to prove the fact that, like a bull in a china shop, anxious thought may upset and inhibit the functional activity of all the vital processes of the body. If sudden and great fear will so thoroughly disturb all the grosser processes, it is reasonable to suppose that continued anxious thought of a milder character will disturb the more delicate work of making blood and brain cells, and carrying on normal functional activity of the vital processes.

When the vital processes are released from the paralyzing grasp of fear, and immediately stimulated by the influence of a deep faith, we find that the improved operations of the vital processes of the body are such that what seems to be a miraculous cure may be, and often is, the result. We find these cures in many functional diseases. Wherever we find them, we find that fears have been dispelled and a deep faith implanted. We find apparent cures in those who make a journey to some noted shrine; we find them in those who accept the teaching of Christian Science; we find them in those who accept the teaching of Divine Healing. We find the devotees of the different forms of Faith Healing immovable in their conviction that some magic power has come from the object of their faith and wrought a cure; and from the press, the pulpit, the medical profession and the public come severe criticism, ridicule, and occasionally sound argument against the various opinions. Careful observation will compel the fair investigator to admit that cures are made. But the investigator finds difficulty in accepting the explanation of the cures when he is asked to believe that the power comes from a shrine or a stone; or when he is asked to believe there is no real disease, no matter, but that all is mind. And the problem is no easier for many when asked to believe that God wrought a miracle. If one can accept what the study of the processes of the body seems to prove, that the sympathetic nervous system and its functional activities—that is, the making and repairing of the body—are so bound to the conscious life that they respond to fear and faith in a far greater degree than we have thought, and that the banishing of fear and the stimulating effect of faith so improve the working of the vital processes of the body that cures are the result, we then have a principle which will aid in the solution of the whole problem of faith cures, and which goes a long way in establishing the truth of the claim here made, that anxious thought is an important etiological factor in functional disease.

In every honest investigation of faith cures one will find two things, viz., that fears have been allayed, and that a strong faith has been implanted in the mind of the patient.

I am speaking now of functional disease, the patient who has undergone all the modern tests for diagnosis—a complete history, a general physical and neurological examination, microscopic and chemical studies of the blood, urine, stool, and gastric contents, the Wassermann reaction, the various tests of the spinal fluid, the fluoroscopic and X-Ray examination, the determination of basal metabolism, the electrocardiographic examination, and other special investigations. Such physical examinations may reveal disturbance of function, such as tachycardia, indigestion, tremor, dermatographia, moist hands, increased reflexes, but without any definite pathological changes in the organs to account for them. Outspoken hyperthyroidism, disturbance of the glands of internal secretion, and early pulmonary tuberculosis have of course been excluded. No pathology is found, and often the patient is told that he has no disease but needs a tonic and rest, and to stop his worry; or he is possibly laughed at, told he imagines it all, and no effort is made to remove the cause of his trouble—anxious thought—simply because it is not recognized as the chief etiological factor.

The patient, however, knows too well that he is suffering, and does not take kindly to the diagnosis that he imagines it all, and often consults the osteopath, the chiropractor, or the Christian Scientist, where he gets most positive assurance that he can be cured; and when the methods adopted inspire the patient with a great faith the physiological effect of which improves the functioning of the vital processes, relief and cure often result. Or perhaps the patient may come under the care of a specialist who does not consider anxious thought as a real etiological factor in functional disease, but searches for the pathology; and many times slight anatomical variations which have no etiological bearing in the case are attacked by the removal of the appendix, or a foot or two of the bowel is removed, the coccyx amputated, the eye muscles cut, the teeth extracted, or the nose and sinuses attacked by unskilled operators, and, according to Cushing in a recent article, much irreparable damage is done. The day of removing ovaries for functional disease is past.

The revelations of research workers in pathology, bacteriology, physiology and sanitation have lifted medicine from the rut of superstition and empiricism and furnished a sound scientific basis for future progress. The study is fascinating and the results brilliant, and the quest for the pathology and the bacteriology of disease has become with many of the modern clinicians the all absorbing thought and aim. And great is the good they have done and marked is the advance in medicine because of their enthusiasm; but many of the ills and sufferings of humanity have no recognizable pathology.

Pathological anatomy is the result of disturbed function—the wrecks left in the wake of battle, where the defenders of the body have fought a foreign invader. When pathogenic bacteria enter the human domain, pathological tissue is quickly formed, serum poured out, retaining walls built, and all the necessary phenomena to rid the system of, and protect it from, its unwelcome guest.

Not so when anxious thought enters the mind. There is profound disturbance of function, but no serum nor retaining walls are produced to restore normal functioning. Serum and retaining walls are not needed, consequently there is no recognizable pathology unless we agree, as I think we should, with some of the modern pathologists and include in the domain of pathology disturbed function. No, anxious thought seldom produces pathological anatomy, but it does produce disturbed function which causes much suffering.

I must beg your indulgence while I report a few cases common to the experience of all, to illustrate my point that anxious thought is the principal etiological factor in many functional diseases.

Some years ago I journeyed fifty miles from Albany to see Mrs. A., married, aged thirty-five. She was in bed where she had lain for six weeks under the care of two nurses, the family physician and consultants. She was badly emaciated, spoke in a whisper as I attempted to examine her chest, saying, "Be careful, you will make me vomit." For six weeks she had vomited all food, which consisted of peptonized milk and meat juice. Three months before she had consulted a surgeon who told her she had heart disease and cautioned her about going upstairs, etc. This advice planted a great fear thought in her mind which inhibited the functioning of her vital processes; and, when her stomach gave out, she and the family thought she probably had cancer of the stomach. I found she had a murmur at the apex, systolic in time, not transmitted to the left, no rales at the bases, no edema of the legs, no increased cardiac dullness, and, as far as I could determine, there was no evidence of organic disease of the stomach, lungs, liver, vagina or rectum. I therefore told her she had no serious disease of the heart, no cancer or ulcer of the stomach, but that she was starving to death and would surely die if she did not eat, to which she replied, "I know it, but I can't keep food down." I laughed and said in a most emphatic way, "I'll fix the vomiting. If you will take a tablet I have, you can't vomit if you try." I then ordered shredded wheat biscuit, toasted, eaten with butter and chewed until it was like cream in the mouth, hamburg steak eaten in the same way, taking great pains to write in detail her diet and how she was to eat it, saying, "Your old stomach will just laugh to see some decent food coming down. No wonder it was disgusted, with the slops you have been sending down." There was no more vomiting, but three good meals every day were eaten with relish, with rapid gain in weight, and perfect health ever since—more than ten years. Fear in her mind about the heart disease caused the upset of her vital processes, caused the hysterical vomiting and all. I removed the fear by convincing her that she had no serious heart disease and that my tablet would surely prevent the vomiting. The tablet tasted bitter, and looked black and powerful—nux, charcoal and pepsin which the family physician happened to have with him.

Anna Jones, a maiden of sixteen years, shocked by the sudden death of her mother, lay in bed, under the care of a competent physician, for three months troubled with insomnia and fainting spells. Whenever she was raised to a sitting position she would blink her eyes, throw up her arms and fall apparently unconscious to the pillow, to the great consternation of a devoted aunt and an anxious father. Failing to get the father's consent to move her from the sympathizing friends to a hospital, I explained to her the physiological effect of anxious thought and grief upon the building and repairing plant of her body, and told her that her blood had become impaired and must have more oxygen, that the best way to get oxygen was to take a sleigh ride every day and breathe in all the cool, fresh air possible. "But," she said, "I can't sit up, I can't be dressed." "Oh," I said, "I'll fix the fainting. I can give you a remedy that will prevent the fainting." Putting twenty drops of the tincture of Ignatia in one-half glass of water, stirring it well, covering it carefully, I said with precision, "Give her two teaspoonfuls at seven, eight, nine and ten o'clock tomorrow morning, and as soon as she swallows the last dose, take her out of bed at once and dress her; she can not faint." I then asked her physician to be on hand with his sleigh, and drive her at a rapid gait for four miles and back, she to take frequent long breaths during the ride. This was done, and Anna had no more fainting spells and was cured.

The plan of cure of curable disease is simple. Remove the cause, supply proper nourishment with all the conditions required by the vital processes for their normal functioning, and they will do the rest. Anxious thought was the cause of Anna's illness. Grief and shock upset her manufacturing and repairing plant, and after she fainted once, the fear of fainting caused her to faint again. Fear and faith can not be in the mind at the same time. I removed the fear by planting faith—faith that the medicine would prevent the fainting.

Mary Lynch, a school girl of twelve years, broke down under the stress of school work, and for six months she suffered from constipation, anorexia, indigestion and resulting emaciation. Headache, insomnia and pain in the spine were constantly complained of. Under my care for three months she made no improvement. A neurologist for a month had no better results with rest in bed, with forced feeding, and later mountain air and electricity. When the patient came under my care the second time, added to the above, she had ptosis of one eye-lid. The mother, one day, tired and worn by the daughter's long illness, turned on me with a volley of severe criticism, which made me angry, and I replied by telling her that she was the cause of her daughter's illness, and giving her in a most emphatic manner an explanation of how a stomach is influenced by the attitude of mind; how a disagreeable sight or smell would cause vomiting; how the mouth would water at sight of pleasant food, etc.

The patient heard the little quarrel and evidently was deeply impressed by my argument, and with great earnestness she said, "Doctor, is that what ails me?" I said, "Certainly. So long as you are afraid you will vomit, so long as you expect to vomit, the stomach takes the suggestion and throws up the food." She replied, "Well, if that's what ails me, I'll not vomit again." And she did not; but from that time ate three good meals a day, gained fifteen pounds in a month, and remained well.

In my talk to the mother (in greater detail than here given) the daughter caught the idea that the power to restore was within her, and that by her anxious thought she was crippling the functioning of her vital processes. Her fear left her and a great joy and hope-faith filled her mind with the thought that she had found the real way to get well. With fear removed, and under the stimulating influences of the faith, the digestive machinery at once resumed normal functioning: a very vivid demonstration of what faith will do for the vital processes which are crippled by fear.

If an acute appendicitis is the cause of vomiting, there is one definite mode of procedure; to remove that cause—open the abdomen and take out the appendix. Not so with anxious thought. One must offer a method of treatment in which the patient has confidence, anything from a sleigh ride to a quarrel with the mother.

It is not always easy to dispel fear and implant faith. Much depends upon the personality and the tact of the physician. It is of no use to tell a patient that fear is the cause, and that if he will have faith, the faith will cure. The patient can not create a faith at will. If a patient comes suddenly upon a wax figure of a robber with drawn revolver, and believes it is a real robber, fear at once shakes the whole organism. Suppose the patient saw us bring in a wax figure and set it up in his room, and then we told him to look at it and be afraid. Suppose he tried to be afraid. Do you suppose the vital processes would be disturbed? The same is true of faith. It is of no use to set up a figure, a plan of treatment, and then tell the patient to have faith in it.

Faith is a condition of the mind; and that condition a trustful expectancy. Through the patient's reasoning one must establish a belief in the methods adopted for his relief. The patient must believe in it, must feel confident he has found the means of cure. He must have a real faith if its stimulating effect is to reach and influence the vital processes.

How shall we, as physicians, establish such a faith in the mind of a patient?

The first and very important requisite is that the physician himself shall have faith in the plan of treatment advised; and secondly, the physician should have a sympathetic understanding of his patient's suffering, and be possessed of a genuine desire to relieve him. As before stated, the plan of treatment of curable disease is simple. Remove the cause, furnish adequate nourishment, and supply proper conditions for normal functioning of the vital processes, and they will do the rest.

To remove anxious thought from the mind is difficult and sometimes impossible; but much may be done to mitigate such suffering. Many worries and fears are groundless, being based upon ignorance, misconceptions, or superstition. Such thoughts can often be dispelled by painstaking reasoning with the patient. Grief over the loss of loved ones is often the cause of insomnia, anorexia, indigestion, constipation, neuralgia and the like. Worries over the loss of money or the loss of a position often have similar effects. While the physician can do little or nothing to change such conditions, he can do much to change the patient's attitude towards them, by reasoning and encouragement, especially if he makes the patient understand the effect of anxious thought upon the vital processes, and encourages him to accept his trials as part of life, take the load and bear it like a man and be proud of himself that he can carry it, and not lie down under the load and complain of his troubles.

In a paper of this kind, the merest outline only of what a physician can do or say to relieve anxious thought can be given. A refined and over-conscientious woman, after recovering from a severe nervous breakdown caused by worries, once said to me, " Doctor, do you remember turning to me one day and saying in a most emphatic manner, ' What you need more than all else is to cultivate a spirit of don't care.' Well, that remark helped me more than any other one thing you did for me." It helped that hypersensitive woman to cease worrying over trivial past mistakes.

The ways and means for removing anxious thought are as varied and as different as are the personalities of the patients who consult us; but once we admit to our minds that anxious thought is one of the common etiological factors of functional disease, practical and intelligent methods will readily suggest themselves. The following case will illustrate one method:

Mary Fish spent several weeks in caring for her father during a painful and fatal illness. After the father's death she became the principal support of the family. Under the stress and strain of grief and her daily labor—that of stenography—her health failed. Many doctors were consulted. No relief being obtained, she went to a hospital where all the modern methods of diagnosis failed to find any pathology to account for her condition, and she was referred to me for treatment for functional disease. I saw her July 14, 1920. She was then suffering from a mucous colitis which had troubled her for eighteen months, having six to ten evacuations a day, neuritis of the left arm, of three months' duration, and insomnia more or less of the time for five years (since her father's illness). There was a severe backache in the lumbar region. She had a tired, haggard countenance and was depressed and emotional; yet she had a real desire to get well, and was willing to co-operate in any way to regain her health. I was willing to accept the diagnosis of the two very competent clinicians who for a week had investigated her case, and I therefore said to her, "No organ in your body shows organic disease. You are like an engine with all parts sound but little steam. By your stress and strain you have exhausted your nervous energy, and you have not power enough to run your machine. All your symptoms of which you complain do not indicate disease. They are simply the body crying out against the way you treat it. By your over-anxious thought you have crippled the functioning of your vital processes until they are unable to carry on their work of nutrition, growth and repair of the body. What you need is more nervous energy; not more ambition, but more power to run the machinery of your body. That energy is right here in the atmosphere, surrounds you; and as the railroads and street railways take mechanical energy from the atmosphere to run cars, as the farmers take nitrogen to fertilize their fields, as you take oxygen for physical life (you can't live twenty minutes without it), so you may take vital energy for your exhausted body if—if what? If you can supply the conditions. I will tell you as nearly as I can what those conditions are, and try to show you how to furnish them.

"First, you must dismiss from your mind anxious thought. Stop worrying about your symptoms. Don't think you are sick. Think you have no real disease. Think, and know, that if you will give your vital processes half a chance, they will cure you. To give them a chance, you must stop interfering with them by worry. Bear your burdens with courage. Accept them as part of the common experience of life and be proud of yourself that you can carry the load and not complain. Be a hero in the battle of life, and not a slacker."

I then taught her abdominal breathing—to let the abdominal instead of the chest wall rise with inhalation and fall with expiration. When she could do this well, I gave her the following exercise to prepare the body for getting the energy from the atmosphere. When she retired at night to relax every muscle in her body, dismiss her worries, and begin the great feat of renewing her vital energies by taking (breathing abdominally) one deep inhalation, all the air she could possibly take in, and then forcing it out, contracting every muscle in the body as she squeezed out the last cubic inch of air, contracting the shoulders, hips and back in towards the spine, and lastly contracting the arms and legs, making them perfectly rigid, and then suddenly let go, and fill the lungs again to their utmost capacity. Take three breaths in this manner, rest a minute, then take three more, rest again, and then take three more, thus continuing breathing and resting until nine such breaths were taken. By this exercise I explained to her that she had squeezed out much of the old residual air in her lungs, and had expanded and brought into action more air cells, so that she would when breathing be taking more air, more oxygen, to purify her blood, and that by the alternate contracting and relaxing the muscles of her body she had started up the stagnant capillary circulation, and prepared the body for taking on new life energy from the atmosphere, to secure which she should get perfectly quiet and calm, with no thought in her mind but one of gratitude that a new life was hers and hers for the taking, and then gratefully and reverently breathe it in, not by violent breathing, but, closing the eyes and mouth, by simply taking long, steady breaths, inhaling and exhaling them through the nose.

She reported at my office frequently, when I supervised the exercises and encouraged her in the work, noting steady improvement. On August 10, I made the following note: " For last two days no diarrhea except one morning stool with less mucus. No neuritis. No pain in the back. Sleeping soundly all night, usually falling asleep before finishing the quiet breathing.

" August 13, patient doing well. No neuritis. No backache. No neckache. Still some mucus colitis. Going on vacation.

" September 1, returned from vacation. Gained seven pounds and free from all symptoms except slight mucous colitis.

" October 27, all symptoms returned, except the insomnia. Still sleeps well." This relapse I attribute to overwork, as she had done, besides her own work, that of another stenographer for three weeks.

In 1908 a clergyman, a nervous wreck, came under my care and I gave him the above instructions. During the preparation of this paper, in answer to my inquiry, he wrote me the following letter:

" I came to see you first in August, 1908, after I was a wreck from what other physicians considered to be grippe—fourteen times in two years! You declared the whole situation to be the result of overtaxed nerves, simulating grippe. I have never had another attack. No doubt I shall be a neurasthenic so long as I live because I am too great a fool about my work to know my limit; but I have used your breathing exercises more or less constantly ever since, and consider they have had great efficacy, particularly the one combined with stretching. My minister friend who came to see you at my suggestion, and for whom you did so much, is Rev. ————. His address is ————. He is still in active service and doing a man's share in the work of the ministry.

" Always gratefully yours,
" (Signed) ———— ————."

Records of many more cases might be cited; but the object of this paper is not to advocate any particular method of treatment or to record brilliant results, but rather to emphasize the claim, and try to prove it a fact, that anxious thought is often the chief etiological factor in many functional diseases.

A CASE OF "SHELL SHOCK" IN CIVIL LIFE.

By ARTHUR H. STEIN, M.D.

From the Surgical Service of the Albany Hospital

The nervous effects of intense emotional strain involving the risk of death first received medical recognition in 1875 when Erichsen, the London surgeon published an account of a number of cases of obscure injuries of the nervous system resulting from railway collisions. He thought the symptoms were "dependent on molecular changes in the cord itself," and although this was soon refuted by Page, the term "spinal concussion" came into use and was retained for a considerable period. Dana in 1884 claimed that the cases thus designated were really instances of traumatic neurasthenia, hysteria and hypochondria. In 1889 Oppenheim published a monograph recording about forty cases and the term "traumatic neurosis" was applied to the condition. This, however, has likewise been more or less abandoned because of lack of clinical evidence of a neurosis specifically caused by injury.[1]

The term "shell-shock" was originally used in the British army in 1914, but was soon recognized as an extremely loose one inasmuch as some of the cases placed in this category had never been near the firing line.[2] "War neurosis," "war strain," "war shock," "battle hypnosis," "commotio cerebri," etc., are some of the names given to the symptom-complex by various writers. It is obviously impossible to group all of these cases under one heading because of the fact that some of them are due to organic lesions and others, by far the majority, to functional nervous disorders. It has been noted that destruction of the cord may be the result of transmission of energy from a missile of high velocity passing near this structure. This shattering of the cord by molecular vibrations has been apparent to all observers as the result of the use of modern high velocity projectiles. It has occurred in cases where the bullet barely grazed the membranes of the cord; the latter being reduced for some extent to a custard-like material and is as completely and permanently destroyed as though it had been severed by a missile.[3] Injury to nerve tissue also occurs as the result of explosives. Of the so-called shell shock cases, however, only about five per cent suffer from cerebral commotion and 95 per cent from simple emotion.[4] In order to produce cerebral commotion it is necessary that the victim be within a very few yards of the explosion and that the explosion be caused by detonation rather than deflagration. The former is illustrated by the bursting of a shell and the latter by the firing of a gun. If a gun were fired by detonation it would burst. Even in our great explosion catastrophies during the war, there were no cases of shell shock.

In commotional shock the patient may (1) die without a motion or (2) spinal or cerebral hemorrhage may result without loss of consciousness. These examples are very rare, the large mass of cases are found between the two extremes. Focal lesions following shell explosions are rare; commotional troubles without signs of focal lesions are much less rare, while emotional disturbances with or without hysterical manifestations are vastly more frequent.

Many of the shell shock histories are found to comprise combinations of the effects of the bursting of a shell with the physical injuries caused by flying objects, contact with the ground in falling, inhaled gases, horrible scenes, etc. The unquestionable cases where a soldier was in close proximity to a bursting shell and did not fall or lose consciousness, or again where the patient was lying down or sat down after the concussion, the fall being determined by the paraplegia, are uncommon.

There is a vast difference between the early examination at the front and the late examination far from the firing line. Spinal cord lesions are manifested almost always by paraplegia. The indisputably organic nature of these paralyses has been established in most cases by the clinical examination only. The symptomatology of certain of these cases enabled a diagnosis to be made, not only of an indefinite spinal cord lesion, but of hematomyelia. In some observations a lumbar puncture gave exit to a distinctly bloody fluid, revealing the organic nature of the troubles noted.

Cerebral lesions following shell explosions were manifested by hemiplegia for the most part, sometimes aphasic troubles either associated with hemiplegia or alone. There were a few cases in which there was no loss of consciousness and no injury whatever. The onset was delayed from minutes to months. Epilepsy has followed the commotion, not as the direct effect, but as the result of sclerosis of the area (scar formation) determining the onset of the epilepsy after several months.

Some of these patients show numbness and complete paralysis of the legs without signs of injury. This may last from one week to two weeks and tenderness in the lumbar region remains with aching pains shooting up the back. The sphincters are not affected, the muscles are slightly flaccid, superficial and deep reflexes are depressed and an area of hyperalgesia encircles the abdomen above or at the level of the umbilicus. There is no Babinski.[5]

That which dominates the subject of cerebral commotional shock is physical and mental inertia more or less absolute at first and then lightening from complete coma to simple obnubilation and atony. Mydriasis and bradycardia are the usual physical signs. The subject of emotional shock on the other hand, does not really lose consciousness, memory or the instinct of self preservation, and he is not inert or agitated physically or mentally until the point is reached where he is no longer in any danger. The most varied hysterical manifestations are a frequent but never an indispensable accompaniment of the emotional troubles, and then only when the patient finds himself relatively secure.[4]

It has been often noticed that injuries to the central nervous system rarely cause shell shock; that it is rare among prisoners (8 in 60,000) and very rare among the wounded. Malingering as shell shock is quite common and often difficult to detect.[6]

Fatigue, privations and general discomforts of trench life, especially among young subjects (twenty to twenty-two years) are the great predisposing causes. Sometimes there is a history of traumatism, as a fall into a trench, the repeated concussion of exploding shells and scattering of shrapnel, the repetition of tragic scenes as the sight of a dead brother, comrades blown to pieces, etc. In some cases the symptoms come on immediately, in others, the attack comes on under strain or excitement long after. According to one observer, the subject falls into a condition of true somnambulism under stress of emotion caused by incidents of battle. Assisted to a hospital he lies on his back, eyes shut or half shut, or perhaps open and fixed. There appears to be a mixture of coma and sleep but there is not the respiration or appearance of coma and he cannot be aroused as in sleep. It is more the form of a hypnosis. Pushed out of bed he stands motionless until exhausted. The head is bowed, eyes half shut and knees semiflexed. He does not move, but if pushed will stop when the stimulus is withdrawn. If supported, he will tend to fall unless the support is removed. He never hurts himself. There is rarely some spontaneous movement. A state of absolute mutism exists. Later he replies to questions with monosyllables. Physical examination and spinal fluid are negative.

Some patients return to normal gradually, without presenting any other manifestations, others may at any time during recovery fall into a state of hallucinatory delirium, living the most striking episode of the battle over again. Mere reference to battles is apt to throw them into emotional conditions. They remain passive and indifferent when ordinary subjects are spoken of, but at mention of war some evidence fear, caution, recklessness, horror, repulsion or sorrow. Delirium of action, as well as vision, may occur. This psychosis tends to spontaneous recovery. It varies in duration from one or three days to several weeks. The patient has to be fed and taught to do things. The last function to return is consciousness of individuality and memory.[7]

Some of the victims of this disorder are found to have histories of previous nervous affections before entering the army while others, strong, rugged and apparently nerveless, have succumbed after two or three years of strenuous trench warfare.

Mott states that the signs and symptoms of some shell shock cases differ in no way from cases of neurasthenia and hysteria. It occurs in soldiers who have never been exposed to shell fire, but experience the emotional shock of fear and apprehension of what will happen to them if exposed to the terrors of shell fire and trench warfare. . . . Paralysis, tremors, giving way of the legs, mutism and cold blue hands are common signs of shell shock. Other signs are unconsciousness, paraplegia, hemiplegia, monoplegia, blindness, deafness, stammering and stuttering, loss of memory, aphonia, aphasia, insomnia, terrifying dreams, pains in head, back and legs, mental depression, nervousness, fatigue, etc.[6]

Various forms of treatment have been advised—successful in some instances and failing in others. Suggestion, galvanism, faradism, hypnotism, anesthesia, surprise, breathing exercises, etc., have been employed with varying degrees of success.

According to Jarrett writing of shell shock analogues in civil life, many of the soldiers who succumb to mental disease in the army are men who have suffered similar disorders in civil life if subjected to some exciting cause, the range extending from trivial incidents, such as a quarrel or a reprimand, to a profound shock, such as an accident in which the patient is severely injured and a companion killed.[8]

The following is a case admitted to the Albany Hospital in June, 1920, on the service of Dr. Elting, which illustrates shell-shock as occasionally observed in peaceful pursuits:

Male, 19 years; native of Vermont; occupation, chauffeur; chief complaint, paralysis of left forearm, hand and fingers. The family history is negative.

Personal History. Has had measles, mumps, chicken pox and whooping cough in childhood. He has had occasional frontal headaches, coryza and epistaxis, two attacks of hoarseness and infrequent attacks of precordial pain.

Habits. Drinks one cup of tea and one cup of coffee and smokes about ten cigarettes a day. Otherwise the personal history and habits are excellent.

Previous Injury. On May 17, 1920, while cranking an auto truck, his left hand slipped from the lamp on which he supported himself and he fell, his full weight striking on the outstretched left upper extremity. He felt a sharp pain in the wrist which began to swell immediately. Motion of the wrist was possible but uncomfortable. The fingers were freely movable and sensation was not impaired. He consulted a physician at once and a firm bandage was applied, extending from the middle of the forearm to the base of the fingers. He then went back to his work and by driving with his right hand had continued his daily occupation to the present time. Two days after the receipt of the injury, movement of the hand and fingers became impossible. One week after the accident a cast extending over the same region as the original bandage was applied and remained for two weeks. During the period of immobilization he experienced one brief attack of tingling, occasionally a feeling of numbness in the hand, and at times the part felt cold.

Physical Examination. The patient is a well nourished and very well developed boy of 19. He appears alert and intelligent and co-operates willingly and cheerfully. He is right handed. The exposed portions of his skin are tanned markedly by the sun. The physical findings, with the exception of the left arm, are negative.

The left wrist and fingers are held motionless and partially flexed. Passive motion is not impaired and the hand and fingers are held indefinitely in any position in which they are placed. There are no signs of atrophy, actual measurements show the right forearm to be from one-eighth to one-quarter of an inch greater in circumference than the left.

Sensation is slightly diminished over the distribution of the ulna nerve. The patient mistakes heat and cold over the same area, and heat is tolerated more in this region than in other parts of the same or opposite arm. The left forearm is more sensitive than the right except over the ulna distribution. Dermographia is very well marked on the left arm and less so over the trunk. The reflexes are negative. The sense of position in space is not affected and objects placed in the left hand are readily recognized.

Dr. Elting stated emphatically to the patient that the latter would be absolutely cured, at which he appeared reassured and confident. Two days following, the writer gave one treatment with the Faradic current, not in the least with the idea that this form of stimulation would be anything more than suggestive, although the desired result was expected. The forearm was stroked with one pole with the other fixed above the elbow. During this process the strength of the current was gradually increased and the patient was repeatedly assured that when a certain strength of current (almost unbearable) was used, that motion would become possible. Upon reaching the point of endurance the patient was told to move the fingers, which he did slowly but surely. Movements of the wrist then followed to about 50 per cent of normal. Treatment was then discontinued with the statement that it would be continued the day following with somewhat stronger current unless improvement were shown in the meantime. This, however, was unnecessary as the writer was met the next morning with a firm hand grasp followed by an exhibition of perfect motion. There have been no signs of recurrence of the difficulty.

This case would tend to show the possibility of these conditions being due to a temporary separation of synapses in association areas between motion and sensation and the higher intellectual centres.

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FURTHER OBSERVATIONS ON THE PRESENCE OF ROENTGENOLOGICAL SHADOWS ASSOCIATED WITH BURSITIS

By JOHN M. BERRY, M. D.

From the Roentgen Ray Department of the Albany Hospital

In an article entitled, "Observations on the Presence of Roentgenological Shadows Associated with Subdeltoid Bursitis, also on the Presence of Similar Shadows in other parts of the Body,"* the writer gave the following summary—

"It is evident that in certain cases of clinically diagnosed subdeltoid bursitis the Roentgen-ray has shown shadows in the region of the subdeltoid bursa which have been proved by operation to be due to a calcareous deposit: but it is in dispute as to just where the deposit occurs, whether in the bursa, the walls of the bursa, or in the tendons, and bodies of the spinatus muscles. In certain other cases where the Roentgen-ray has shown shadows similar to the above, they have been observed to disappear under simple treatment, to exist without causing serious inconvenience, and to be present in at least two regions other than the subdeltoid, viz.: over the greater trochanter of the femur and at the knee joint. The shadows may appear very shortly after an injury and have been observed to disappear almost as quickly. The shadows may be single or multiple, resembling the shadows of calculi, but are sometimes so extensive as to suggest the extravasation of an opaque fluid into the tissues. The operative findings would tend to show that the shadows are due to a calcareous deposit but it is difficult to believe that a calcareous deposit could be deposited so rapidly and at times reabsorbed so quickly.

Two cases were cited in the above-mentioned article in which shadows similar to those found in the subdeltoid region were found in other parts of the body.

One of the cases was that of a woman who complained of symptoms suggestive of bursitis over the greater trochanter of the right femur. A roentgenogram was taken and a shadow

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* *The American Journal of Orthopedic Surgery*, Vol. XIV, No. 8, pp. 476-483, August, 1916.

To Illustrate Dr. Berry's Case of "Roentgenological Shadows with Bursitis"

Albany Medical Annals, February, 1921

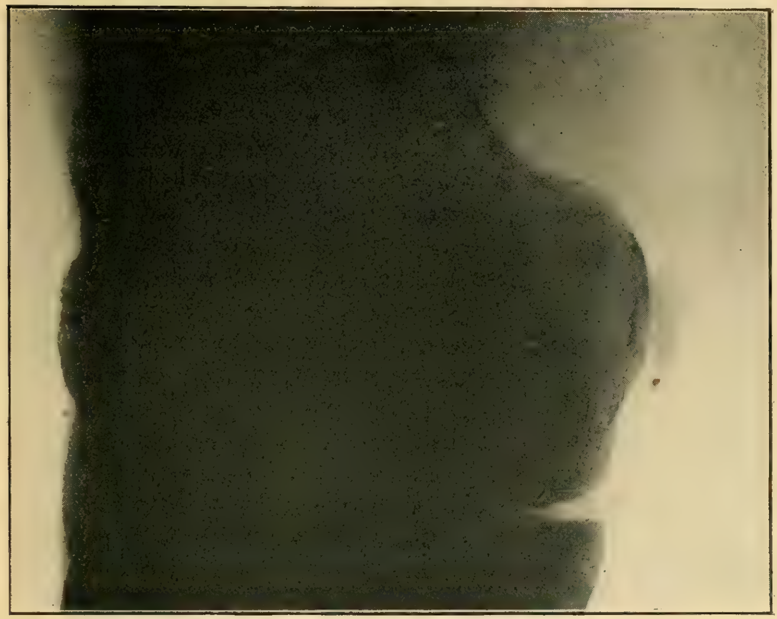


Fig. 1.—Calcareous deposit in a bursa on the inner side of the knee.

suggestive of calcareous deposit was found. Under treatment by use and hot packs the patient quickly recovered; but it was not possible at that time to obtain a second roentgenogram to see whether or not the shadow over the trochanter disappeared. Since the publication of that article the patient has again come under observation and a roentgenogram shows that the shadow in question has disappeared.

The second case was that of a young man who injured the left knee by a fall from a bridge. A roentgenogram was taken six days after the injury and showed a shadow on the outer side of the knee joint. The leg and knee were put in a plaster cast and three weeks later all traces of the shadow had disappeared.

Recently a third case has come under observation in which a shadow suggesting calcareous deposit in a bursa has been found in a region other than the subdeltoid.

The case is that of a man who had complained of a soreness and pain on the inner side of the left knee. The condition had existed for several weeks and was gradually getting worse. There was no history of injury or disease preceding the onset of the symptoms. Examination showed a slightly swollen, slightly reddened area about 1½ cm. in diameter on the inner side of the left knee. A roentgenogram (Fig. 1) showed two well-defined shadows suggesting a calcareous exudate in a bursa. The case was treated by rest and radiant heat. The pain and soreness gradually lessened and a roentgenogram taken two months later showed that the calcareous-like shadow had almost disappeared.

Clinical and Pathological Notes

Reports from the ROENTGEN RAY DEPARTMENT of the ALBANY HOSPITAL

Reported by
JOHN M. BERRY, M. D.

Following is an outline report of the cases presented at the fifth X-ray Conference, held at the Roentgen Ray Department of the Albany Hospital, November 23, 1920. About fifty doctors and students were present at the Conference. Among the out-of-town guests were: Dr. W. R. Whitney, Dr. W. D. Coolidge, Mr. Charles Moore and Dr. Calvin Witter from the Research Laboratory of the General Electric Company, Schenectady; Dr. Malcolm F. Lent from the State Department of Health; and Dr. M. J. Keough of Cohoes.

Case No.	Clinical Diagnosis	X-ray Diagnosis	Final Diagnosis	Remarks
37	Tuberculosis or polysystic kidney.	Enlarged kidney.	—Operation— Adenosystoma of kidney.	In this case there was a palpable mass in the abdomen. The mass was outlined on the wall of the abdomen with wire and the pelvis of the kidney was injected with thorium. On the X-ray plate the shadow of the pelvis was within the shadow of the wire, thus indicating that the palpable mass was an enlarged irregular kidney.
38	Loose body in knee joint.	Loose body in knee joint.	–Operation– Removal of loose body from knee joint.	The loose body was found to be a calcified, displaced and atrophied semi-lunar cartilage.
39	Spur on os-calsis.	Spur on os-calsis.	–Operation– Removal of spur.	

Case No.	Clinical Diagnosis	X-ray Diagnosis	Final Diagnosis	Remarks
40	Sarcoma of wrist.	Tuberculosis or new growth of wrist.	–Operation– Amputation Pathological report—Tuberculosis.	Clinically, this was a case of sarcoma, but the Pathological examination showed tuberculosis. This case was discussed by Dr. Ordway and Dr. Graham.
41	Ulcer of duodenal cap.	Duodenal ulcer, possibility of carcinoma.	–Operation– Carcinoma.	
42	Acromegaly, 2 cases.	Acromegaly.		Characteristic cases: both clinically and from an X-ray standpoint.
43	Clinical findings were those of chronic bronchitis, but repeated sputum examinations gave two positive for tubercle bacilli.	Chronic bronchitis.	Tuberculosis	The X-ray failed to show the tubercular lesion. Two other X-ray plates were shown, one a proved case of chronic bronchitis, and the other a proved case of tuberculosis.
44	?	Bursitis on outer side of knee with calcareous deposit.	Bursitis. Under treatment with rest and heat the bursitis cleared up and the calcareous deposit disappeared.	Lantern slides of a series of cases of sub-deltoid bursitis with calcareous deposit were shown. In most of the cases the calcareous deposit had disappeared with treatment by rest and heat. A case was shown where calcareous deposit was present in a bursa over the greater trochanter of the femur and another case was shown in which the deposit was in the knee.

The sixth X-ray Conference of the Roentgen Ray Department of the Albany Hospital was held in the lecture room of the Department, December 21, 1920. The following cases were presented by Dr. Berry and Dr. Howard:

Case No.	Clinical Diagnosis	X-ray Diagnosis	Revised Diagnosis	Remarks
45	Tuberculosis of the lungs.	Tuberculosis of the lungs.	Tuberculosis of the lungs.	The symptoms suggested tuberculosis of the lungs, but physical signs were absent. The sputum examination was positive for tuberculosis. The X-ray plate showed the site of the lesion. The case illustrates how the X-ray is useful in checking up other methods of examination.
46	Carcinoma of sigmoid.	Obstruction probably malignant in sigmoid.	–Operation– Carcinoma of cecum ascending colon and terminal ileum intussusception of cecum and terminal ileum into transverse colon.	A very interesting case which resulted favorably in spite of the many mistakes made in diagnosis.
47	Tuberculosis of the hip.	Perthes' disease.	Perthes' disease.	The X-ray appearance is typical of the so-called Perthes' disease. In contrast to this case a case of old tuberculosis of the hip was shown. The X-ray appearance of the two conditions varies greatly although clinically they are almost identical.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF DECEMBER, 1920

Tuberculosis	16	Grippe	0
Typhoid Fever	2	Brights Disease	11
Diphtheria	3	Apoplexy	14
Scarlet Fever	0	Cancer	11
Whooping Cough	0	Accidents and Violence	8
Measles	0	Deaths under one year	11
Diarrheal Diseases	0	Deaths over 70 years	41
Pneumonia	8	Death rate	14.53
Broncho Pneumonia	7	Death rate less non-resident	12.48
Influenza	1		

Deaths in Institutions

	Non. Res.	Res.		Non-Res.	Res.
Albany Hospital	5	4	Homeopathic Hospital	0	5
Albany Guardian Society	0	1	Home for Incurables	0	3
Pine Hills Sanitarium	1	0	Albany Hospital Camp	2	0
St. Peter's Hospital	4	8	Convent Sacred Heart	0	1
Infants Home	1	2			
St. Margaret's House	2	1		17	28
Home for the Aged	2	1	Births		188
Public Places	0	2	Stillbirths		6

DIVISION OF COMMUNICABLE DISEASES

Typhoid Fever	6	Whooping-cough	60
Scarlet Fever	19	Tuberculosis	32
Diphtheria and Croup	18	Mumps	1
Chickenpox	26	Pneumonia	39
Smallpox	0	Influenza	5
Measles	95		
German Measles	5	Total	306

Number of days quarantine for scarlet fever:
Longest........ 30 Shortest........30 Average......... 30
Number of days quarantine for diphtheria:
Longest........ 28 Shortest........ 12 Average....... $19\frac{2}{5}$
Fumigations:
Rooms......... 129 Buildings 88
Milk bottles disinfected.. 670

Communicable Diseases in Relation to Schools

	Reported D.	S.F.	M.
Public School No. 3	..	2	4
Public School No. 6	1	..	..
Public School No. 7	..	1	..
Public School No. 14	1	..	2
Public School No. 15	..	..	1
Public School No. 16	..	1	..
Public School No. 17	..	2	3
Public School No. 18	..	1	1
Public School No. 19	1	..	..
Blessed Sacrament	..	..	2
St. John's School	..	..	2
Albany Boy's Academy	..	..	8
St. Agnes School	..	..	1
Academy Holy Names	..	1	..
St. Joseph's Academy	1	..	..
St. Vincent De Paul's School	..	1	40

MISCELLANEOUS

Cards posted for communicable disease	102	Vaccinations	9
Cards removed	82	Vaccination dressings	65
Notices served on schools	213	Children examined for employment certificates	19
Notices served on stores and factories	7	Number of employment certificates issued	19
Postal card returns sent to doctors	102	Taking specimens of blood for Wassermanns	2
Postal card returns received from doctors	82	Taking smears for Gonococci	0
Inspections and reinspections	114	Postal cards sent to milk dealers	56

Tuberculosis

Living Cases on record December 1, 1920		617
Cases reported:		
By card	21	
Dead Cases by Certificate	11	32
		649
Dead Cases previously reported	5	
Dead Cases not previously reported	11	
Removed	8	
Died out of town	1	
Recovered	0	
Unaccounted for	0	25
Living cases on record January 1, 1920		624
Total Tuberculosis Death Certificates		16

Non-resident deaths:

Albany Hospital Camp	2	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	1	
City at large	0	3
Resident deaths		13
Visits to cases of tuberculosis		178
Miscellaneous visits		15
Visits to physicians		19

LABORATORY REPORT

Diphtheria

Initial Positive	29	Unsatisfactory	28
Initial Negative	269		
Release Positive	29	Total	464
Release Negative	109		

Sputum for Tuberculosis

Positive	33	Unsatisfactory	0
Negative	137		
		Total	170

Widals

Positive	3	Unsatisfactory	3
Negative	21		
		Total	27

Meningococcus

Positive	0	Negative	0
		Total	0

Wassermann tests (positive 59)	324	Gonorrhoea Examinations (positive 28)	86
Milk Analyses	218	Miscellaneous examinations	7
Water Analyses	0		
Pathological Examinations	0	Total Examinations	1,296

HEALTH PHYSICIANS' REPORT

Cases assigned	42	Calls made	100

DIVISION OF SANITATION

Complaints		72	Garbage collected from 1st.	
Inspections		91	District bbls.	295
Plumbing	33		Garbage collected from 2nd.	
Sanitary	58		District bbls.	280
Reinspections		65	Garbage collected from 3rd.	
Plumbing	14		District bbls.	420
Sanitary	51			

HEARINGS

Hearings	1	Cases heard	1

Class of Cases

Plumbing	1

Disposition of Cases

Reinspection	1	Abated	0

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION

Inspections		100	Smoke	0	
Old Houses	49		Blue or red	10	
New Houses	51		Peppermint	1	
Plumbing	36		Water test	7	
Building	0		Houses examined		56
Plans submitted		7	Re-examined		41
Old buildings	2		Valid	16	
New buildings	5		Without cause	40	
Houses tested		18	Violations		0

REPORT OF REMOVAL OF DEAD ANIMALS

Horses removed	10	Cases of eggs removed	100
Dogs removed	9		
Cats removed	11		
Total	30		

DIVISION OF MARKETS AND MILK

Public market inspections	26	Milk cans inspected	172
Market inspections	123	Milk cans condemned	0
Fish market inspections	17	Lactometer readings	95
Fish peddler inspections	0	Temperature readings	95
Slaughter house inspections	1	Fat tests	22
		Sediment tests	22
Rendering establishment inspections	1	Chemical tests	0
		Cows examined	316
Pork packing house inspections	8	Cows quarantined	2
Hide house inspections	0	Cows removed	4
Milk depots inspected	47	Complaints investigated	2
Stores inspected	25	Milk houses inspected	32
Dairies inspected	32		

Medical News

The Albany Guild for Public Health Nursing.— Report for January, 1921.—Number of new cases this month, 241; classified economically, free, 58: Bed cases, 18; prenatal, 3; dispensary social service, 5; tuberculosis (pos.), 12; tuberculosis (super.), 2; hospital social service, 7; venereal social, 11. Paid, 183: Limited means (bed cases), 94; metropolitan (bed cases), 46; metropolitan prenatal, 17; industrial bed cases, 9; industrial social cases, 16; Western Union, 1. Cases carried over from last month, 631: Bed cases, 91; prenatal cases, 43; dispensary social service, 2; tuberculosis (total), 327; hospital social service, 22; venereal, 145; industrial, 0; Western Union, 1. Classification of bed cases: Medical, 99; surgical, 7; obstetrical, 36; prenatal, 20; confinements, 25; maternity, 8; miscarriages, —; number of babies born, 33.

2. *Visits for Nurses.*—All departments, 1,654: For bed care, 1,079; prenatal instruction, 57; tuberculosis (sup. and inst.), 62; venereal disease instruction, 36; hospital social service, 88; general social service, 120; for other purposes, 130; dispensary social, 5; supervision, 53; follow-up calls, children's observation clinic, 24.

3. *Source of Nursing Cases.*—Metropolitan agents, 43; doctors, 86; nurses, 3; dispensary, 8; family or friends, 16; other sources, 28.

4. *Disposition of Bed Cases.*—Discharged recovered, 52; discharged improved, 65; discharged unimproved, 24; discharged dead, 3; discharged to other care, 39; carried, 103. Disposition of other cases. prenatal—discharged to maternity care, 33; discharged to hospital, 5; discharged to other care, 6; carried, 43. Dispensary social service—discharged dispensary care, 5; carried, 0. Hospital social service—discharged home, 3; discharged dead, 0; discharged to dispensary, 1; discharged to Pavilion "F," 0; discharged lost, 0; carried, 32. Venereal—discharged cured, 0; discharged temporarily, 12; discharged to other care, 17; carried by dispensary, 65; carried under supervision, 62; carried under care at the House of Good Shepherd, 0. Tuberculosis—discharged dead, 3; discharged left town, 1; discharged not T. B., 2; carried (positive), 339; carried (super.), 2. Total number of cases carried over into February, 646.

5. *South End Dispensary Report.*—Number of clinics, 90: Surgical, 10; medical, 9; gynecological, 7; prenatal, 0; eye and ear, 13; venereal, 9; nerve, 4; nose and throat, 9; skin, 5; children, 4; lung, 4; children's lung (observation clinic), 7. Clinics with doctor attending, 81; clinics without doctor attending, 9; number of new patients treated, 175; number of old patients treated, 568; Total number of patients, 743.

6. *Industrial Dispensary, at Huyck's Mills.*—Number of clinics held, 21; number of new cases treated, 4; number of old case streated, 169; Total number treated, 173. Number of physical examinations, 0.

No industrial cases are really discharged, but we do not add them on to our cases carried, nor do we add on the South End Dispensary cases as carried on our General Report. They are kept separate.

ELEANOR ARCHER,
Acting Superintendent.

POST-GRADUATE COURSE IN INFECTIOUS DISEASES AND PUBLIC HEALTH.— The third annual Post-Graduate Course in Infectious Diseases and Public Health offered through the co-operation of the Albany Medical College and the New York State Department of Health, will begin March 3, 1921, under the direction of Charles C. Duryee, M. D., of the State Department of Health. Such slight changes in the course have been made as experience has shown advisable, otherwise it is the same as has been given during the past two years.

It is believed that the curriculum will appeal to health officers and other physicians because of its practical features and the fact that a minimum sacrifice of time and money will be required of its participants.

Registration will be limited to graduates in medicine and as far as practicable the course will consist of informal conferences and practical demonstrations. It will be noted that a special effort has been made to co-ordinate the various laboratory, clinical and didactic features with reference to various subjects and diseases.

Attention is called particularly to certain features which will prove of especial interest to registrants both as health officers and practicing physicians.

> Practically all of one day will be devoted to consideration of the most recent advances in diagnosis, management and treatment of pneumonia, both from the laboratory and clinical standpoint;
>
> A morning will be devoted to a practical demonstration and discussion of the physical diagnosis of incipient tuberculosis, with opportunity to examine cases and compare findings;
>
> Special consideration will be given to the essential features of the theory of infection and immunity, to important diagnostic laboratory tests and to the prophylactic and therapeutic use of vaccines and sera.
>
> The purpose and possibilities of industrial medical departments will be discussed.

Clinics will be given at the Albany Hospital presenting diseases of the heart, liver and kidneys, and also cases of other preventable diseases of adult life. These clinics which have been so successfully given in previous years will be increased in number slightly, but will continue to bear a close relation to preventive medicine and are especially arranged in view of the large clinical experience of those taking the course.

Opportunity will be provided to the members of this class for small groups to receive personal clinical advantages. These groups will be limited to four physicians at one time who will report to the record room of the Albany Hospital one day each week at 9:30 in the morning.

They will be assigned cases which have been admitted to the medical service during the previous week and at 11.30 bedside visits and conferences will be held. The physician to whom the case is assigned will be regarded as the attending physician and the other members of the group will discuss the case from the standpoint of consultants. The opinion of the surgical and special services and laboratories will be freely made use of as well as that of the full-time teaching medical service.

This work is not allowed to interfere with the Post-Graduate Course in Infectious Diseases and Public Health, but is arranged so that the dates in no way conflict.

Those who desire special work in venereal diseases and the administration of arsphenamine on application to the director will be assigned in classes of two to assist in the clinics now being held in Albany, Troy and Schenectady.

The fee for the course is twenty-five dollars, payable in advance or in monthly instalments. Those who have completed this or other New York State health officers' courses are invited to attend all or any part of the present course, upon payment of a nominal fee of five dollars.

All communications and applications should be addressed to Charles C. Duryee, M. D., State Department of Health, Albany, N. Y.

FACULTY OF INSTRUCTION

Hermann M. Biggs, M.D., Commissioner of Health.

Thomas Ordway, M.D., Albany Medical College, Dean and Associate Professor of Medicine.

Charles C. Duryee, M.D., Sanitary Supervisor, State Department of Health, Director of Course.

Augustus B. Wadsworth. M.D., Director, Division of Laboratories and Research, State Department of Health.

Matthias Nicoll, Jr., M.D., Deputy Commissioner, State Department of Health.

Arthur Sautter, M.D., Health Officer, Albany, N. Y., Clinical Professor of Dermatology and Contagious Diseases, Albany Medical College.

Edward S. Godfrey, Jr., M.D., Director, Division of Communicable Diseases, State Department of Health.

William H. Park, M.D., Professor of Bacteriology and Hygiene, New York University.

Paul B. Brooks, M.D., Assistant Director, Division of Laboratories and Research, State Department of Health.

Frederic C. Curtis, M.D., Consulting Dermatologist, State Department of Health.

L. W. Gorham, M.D., Albany Medical College, Instructor in Medicine and Clinical Pathology.

Hermon C. Gordinier, M.D., Albany Medical College, Professor of Medicine.

L. M. Wachter, Chemist, Division of Laboratories and Research, State Department of Health.

J. S. Walton, M.D., Sanitary Supervisor, State Department of Health.

John M. Berry, M.D., Albany Medical College, Clinical Professor of Orthopedic Surgery and Roentgenology.

M. F. Lent, M.D., Director, Division of Tuberculosis, State Department of Health.

F. W. McSorley, M.D., Supervisor of Tuberculosis Hospitals and Clinics, State Department of Health.

P. J. Hirst, M.D., Superintendent, Herkimer County Tuberculosis Hospital.

Clinton B. Hawn, M.D., Albany Medical College, Instructor in Medicine.

W. E. Lawson, M.D., Medical Director, Albany Hospital Tuberculosis Committee.

Joseph S. Lawrence, M.D., Director, Division of Venereal Diseases, former Bacteriologist-Pathologist, State Department of Health.

P. W. Harrig, M.D., Albany Medical College, Instructor in Dermatology.

Edward H. Marsh, M.D., Consultant, Division of Venereal Diseases, State Department of Health.

Geo. S. Graham, M.D., Albany Medical College, Professor of Pathology.

M. Edgar Rose, M.D., Director, Division of Child Hygiene, State Department of Health.

J. H. Miller, D.V.S., Chief Milk Inspector, City Department of Health, Albany, N. Y.

Everett S. Elwood, Secretary, State Hospital Commission.

Joseph A. Warren, A.B., LL.B., Legal Adviser, State Department of Health.

William A. Howe, M.D., Medical Inspector of Schools, State Department of Education.

LeRoy Hubbard, M.D., Orthopedic Surgeon, State Department of Health.

John A. Smith, M.D., Secretary, State Department of Health.

Otto R. Eichel, M.D., Director, Division of Vital Statistics, State Department of Health.

J. G. Wilson, M.D., P.A., Surgeon, U. S. Public Health Service.

Theodore Horton, C.E., Director, Division of Sanitary Engineering, State Department of Health.

J. M. Mosher, M.D., Albany Medical College, Clinical Professor of Mental Diseases.

C. A. Holmquist, Principal Assistant Engineer, State Department of Health.

H. L. K. Shaw, M.D., Consultant on Child Hygiene, State Department of Health.

Arthur W. Elting, M.D., Albany Medical College, Professor of Surgery.

CALENDAR OF COURSE

NOTE.—Unless otherwise indicated laboratory demonstrations will be at the State Laboratory, under the direction of the staff of the Division of Laboratories and Research, State Department of Health, and other conferences and lectures at the Albany Medical College and Albany Hospital.

Thursday, March 3.—9:30 A.M. Introduction to course, Dr. Duryee. 10:15 A.M. Lecture and demonstration on general bacteriology and technique, Dr. Wadsworth. 12:30 P.M. Round table luncheon; informal talk on the activities of health officers (place to be announced), Dr. Biggs. 2.00 P.M. Subject and speaker to be announced.

Thursday, March 10.—9:30 A.M. Laboratory work ; practice in making, staining and examining smears, etc. 1:15 P.M. Diagnosis of the exanthemata and other infectious diseases, Dr. Nicoll. 2:30 P.M. Conference on common skin diseases; visit to Albany Hospital, Pavilion G, Contagious Department, under direction of Dr. Sautter.

Thursday, March 17.—9:30 A.M. Laboratory; pneumococcus differentiation (including animal demonstration) ; demonstration of prophylactic and therapeutic measures in pneumonia. 2:00 P.M. Diagnosis and treatment of pneumonia with clinical demonstration, Dr. Ordway.

Thursday, March 24.—9:30 A.M. Laboratory diagnosis of typhoid and paratyphoid; detection of carriers in typhoid, paratyphoid, dysentery, etc. 1:30 P.M. Principles of epidemiology, Dr. Godfrey. 2:30 P.M. Points in diagnosis of the exanthemata and other infectious diseases, Dr. Nicoll.

Thursday, March 31.—9.30 A.M. Diphtheria, Vincent's angina and allied throat infections; virulence test for diphtheria. 1:30 P.M. Municipal control of diphtheria, including dosage and methods of administration of antitoxin, Dr. Park. 2:30 P.M. Demonstration of Schick test, and active immunization, Dr. Brooks.

Thursday, April 7.—9:30 A.M. Laboratory; demonstration of preparation of vaccines. 1:00 P.M. Lecture, demonstration and conference on infections, immunity and anaphylaxis, Dr. Wadsworth.

Thursday, April 14.—9:30 A.M. Demonstration of influenza bacillus, streptococcus staphylococcus and other bacteria of the upper respiratory tract. 1:30 P.M. Smallpox and vaccination, Dr. Curtis. 2:30 P.M. Smallpox and the Sanitary Code, Dr. Duryee.

Thursday, April 21.—9.30 A.M. Laboratory; practical use of laboratory and its facilities, Dr. Brooks. 2:00 P.M. Clinic on serum and vaccinotherapy, at Albany Hospital, Drs. Ordway and Gorham. 3:00 P.M. Clinical conference, Dr. Ordway.

Friday, April 22.—9:45 A.M. Diseases of endocrine glands with clinical demonstration, Dr. H. C. Gordinier.

Thursday, April 28.—9:30 A.M. Lecture and demonstration of sanitary examination of milk and water, Mr. Wachter. 11:00 A.M. Relation of milk to public health, Dr. Walton. 2:00 P.M. Orthopedic clinic, Albany Hospital, Dr. Berry.

Friday, April 29.—9:30 A.M. Albany Hospital, importance of X-ray in diagnosis of tuberculosis; exhibition of plates, Dr. Lent. 2:00 P.M. Conference (with practical demonstration); examination of cases on early diagnosis of pulmonary tuberculosis, Dr. Lent, Dr. McSorley, Dr. Hirst, Dr. Gorham, Dr. Hawn, and Dr. Lawson.

Thursday, May 5.—9.30 A.M. Albany Hospital, lecture and clinic, venereal diseases, Dr. Ordway and Dr. Lawrence. 2:00 P.M. South End Dispensary, lecture and demonstration; preparation and administration of syphilitic therapeutic products, Dr. Harrig and Dr. Marsh.

Friday, May 6.—9:30 A.M. Laboratory demonstration of dark field and complement fixation, Dr. Brooks. 2:00 P.M. Albany Hospital Laboratory, demonstrations of spinal fluid examinations, collodial gold test, Dr. Graham. (*Note*: On request, arrangements will be made for a limited number of men to assist at the venereal disease clinics at Albany, Troy and Schenectady.)

Thursday, May 12.—9:30 A.M. Schenectady, conference on health administration; visit to city health department and health center, under direction of Dr. Duryee. 1:30 P.M. Conference on infant hygiene and prenatal care (at Child Welfare Station), Dr. Rose. 2:30 P.M. Conference on bedside and terminal disinfection, Dr. Duryee.

Friday, May 13 (*forenoon only*).—9:30 A.M. Conference and practical demonstration of dairy inspection and scoring, under direction of Dr. Miller.

Thursday, May 19.—9.30 A.M. Demonstration of lumbar puncture and intraspinal therapy, Dr. Gorham. 1:30 P.M. Duties of health officers in connection with the insane, Mr. Elwood. 2:30 P.M. Conference on general laws relating to duties and powers of health officers and health boards, Mr. Warren.

Friday, May 20 (*forenoon only*).—9:30 A.M. Conference on medical school inspection, Dr. Howe. 11:15 A.M. Poliomyelitis and its after-care, with cases, Dr. Hubbard.

Thursday, May 26.—9:30 A.M. Conference on control of communicable diseases in schools, Dr. Smith. 11:00 A.M. Conference on vital statistics, Dr. Eichel. 1.15 P.M. Isolation hospitals, Dr. Wilson. 2:30 P.M. Public health administration, Dr. Duryee.

Friday, May 27 (forenoon only).—9:30 A.M. Medical College, demonstration of disinfection and sterilization, Mr. Wachter. 11.30 A.M. Conference on water supply and water purification, Mr. Horton.

Thursday, June 2.—9:30 A.M. Albany Hospital, examination of blood in relation to diagnosis; urinary examination, Dr. Gorham. 2:30 P.M. Conference and clinic on mental hygiene and insanity, Dr. Mosher.

Friday, June 3 (*forenoon only*).—9:30 A.M. Conference on sewage disposal, Mr. Horton. 11.30 A.M. Conference on rural sanitation, Mr. Holmquist.

Thursday, June 9.—9:30 A.M. The health officer and the public health nurse, Dr. Smith. 11:00 A.M. Preventable diseases of adult life, Dr.

Ordway. 1:30 P.M. Review and general discussion, including health law, sanitary code, health administration, communicable diseases and epidemiology, Dr. Duryee and Dr. Brooks.

Friday, June 10 (*forenoon only*).—9:30 A.M. Industrial medical departments. 11:15 A.M. Infant feeding, Dr. Shaw.

Thursday, June 16.—9.30 A.M. Clinics by Drs. Elting, Ordway and Hawn.

Friday, June 17.—9:30 A.M. Final examination, written and oral.

PERSONALS—DR. HUGH S. CHIDESTER (A M. C. '15), is in active practice in Saugerties, N. Y., with office at 27 Second St.

—DR. GEORGE S. MUNSON (A. M. C. '80), announces the removal of his office from 30 Eagle St., to 261 State St., Albany, N. Y.

—DR. L. HERBERT GAUS (A. M. C. '07), after an active service in the war, has resumed practice, limited to diseases of the eye, with office at 220 State St., Albany, N. Y.

DIED.—DR. JOSEPH B. BETTS (A. M. C. '94), Senior Physician at the Buffalo State Hospital, died January 29, 1921.

—DR. DANIEL T. CONDICT (A. M. C. '74), died at Goshen, N. Y., on November 19, 1920.

—WILLIAM DEXTER SWAIN (A. M. C. '67), died at his home in Copake, N. Y., November 10, 1920, aged ninety-three years.

Dr. Swain began practice at Copake in 1868, and continued in active work until 1905 when his advancing years obliged him to withdraw all but office consultation practice. He was married and is survived by his wife and one son, Dr. Howard T. Swain, an instructor in Harvard Medical School.

Current Medical Literature

MEDICAL HISTORY

The School of Salernum. The English Version by Sir JOHN HARINGTON. *History of the School of Salernum* by FRANCIS R. PACKARD, M.D. *A Note on the Prehistory of the Regimen Sanitatis* by FIELDING H. GARRISON, M. D. New York: Paul B. Hoeber, 1920.

This attractive volume contains the Latin text of Arnold of Villanova of the Regimen Sanitatis Salernitatum, Harington's translation reproduced in the style of 1608, plus a careful history of the School of Salerno by Dr. Packard and a short note by Dr. Garrison. There are numerous illustrations from the various texts and a photograph of Osler's MS of Harington's translation.

The School of Salerno was always closely associated with the Benedictine Monastery near Naples and perhaps owed its life to the monks.

The teaching of medicine was carried on by them as early as the 11th Century, when Salerno was noted for the healing properties of its air and baths. Translations of Arabic, Greek and Latin texts were possible by the learned monks and it is from them that they received largely their therapeutic inspirations. Degrees and licenses to practice were given by the school and women were probably admitted to the courses. Before the age of printing their doctrines were spread broadcast by innumerable manuscript copies of the Regimen Sanitatis. The poem was supposedly written as a work of medical advice for the benefit of Robert, Duke of Normandy, the eldest son of William the Conqueror. On his way to the Holyland as a Crusader he passed a winter at Salerno. The authorship is in doubt. Many manuscript copies are still in existence; the Bodleian Library and the British Museum each contain several.

Harington's translation was first published anonymously in 1608. It is neither very exact or poetical but seems to have outlasted most of the other translations. Harington was an Elizabethan noble who curried favor with the court. His fame largely rests on his rather indifferent translation of Ariosto's romantic Italian Epic, *Orlando Furioso.*

The poem is full of quaint phraseology and sound but homely advice. It is really a letter of instruction on mental, moral and physical hygiene, from a physician to his patient. There are many passages of Rabelaisian wit and indelicacy, partly due to Harington. In reading the verses one is constantly struck by the modernity of thought, for much of the more general matter is still the soundest thought of the Twentieth Century physician. Both Dr. Packard and the publisher should be congratulated on their successful effort to bring a brilliant bit of the Dark Age into the hands of the medical profession of today.

HENRY VIETS.

American Medical Biographies. By HOWARD A. KELLY, M.D., LL.D., F.A.C.S., Hon. F.R.C.S. (Edin.) and WALTER L. BURRAGE, A.M., M.D. Baltimore: Norman, Remington Company, 1920.

This work from the indefatigable pen of Dr. Kelly is a second edition in one volume of his "Cyclopedia of American Medical Biography," published in 1912. There have been many additions, corrections and deletions, the present volume containing 1,948 biographies. Nearly one hundred years ago James Thacher published his famous "American Medical Biography," the first attempt to cover a then unexplored country. It was a rare venture accomplished nearly single handed. In a century we have passed through an evolution of biographies from Thacher's 716 octavo pages with 163 biographies to Kelly's large quarto of 1,300 pages. Such a book as the present work was only possible through the kindness of many friends who have aided Dr. Kelly in its production. One misses the portraits which form such a a delightful part of Thacher's volume, but it would be hardly possible to insert nearly two thousand of them, even if they could be found, and keep the book within the pocketbook of "every doctor in the United States and Canada," the aim of Dr. Kelly. The book is well printed and bound, but the paper leaves much to be desired. It is doubtful if it will stand the wear and tear of constant reference which it so richly deserves.

HENRY VIETS.

The Dawn of Modern Medicine. By ALBERT H. BUCK, B.A,, M.D. New Haven: Yale University Press, 1920.

Dr. Buck has continued his well-known volume, "The Growth of Medicine," in the present book, which covers in part the Eighteenth and Nineteenth Centuries. It is the story of the great revival of medicine in Western Europe. Special emphasis is laid upon the French influences, largely because of his researches in the rich collections of medical works discovered in the library of Transylvania College at Lexington, Ky. When Dr. Buck learned of this remarkable collection, purchased in Paris in 1819, his keen sense of values led him to spend seven months at the College, and the results of his labors are set forth in the pages of his book. He throws a brilliant light into many dark corners of medical history. His work is invaluable to the students of this period.

Medicine in Germany, Italy and England is perhaps undervalued, but Dr. Buck fully justifies his researches by his remarkable pictures of the French physicians and surgeons. In no other book can we find such vivid accounts of Bichat, Laënnee, Broussais, Petit, Baron Larrey and many others. An exception to his emphasis on the French school is a splendid chapter on Jenner and vaccination. He is decidedly weak on William and John Hunter and admits that his information regarding them is based upon Pettigrew's "Medical Portrait Gallery" and Parkinson's "Hunterian Reminiscences," both sources decidedly second rate in character. As a popular history of medicine the volume is perhaps not readable enough, consisting as it does, of a series of biographies connected with the weakest kind of links. It is, however, a most valuable reference book and certainly ought to find a place on the shelf of any thoughtful physician who wishes to interpret the Present in terms of the Past.

The volume is profusely illustrated. In general appearances it compares with the best English publications. Such volumes are perhaps only possible through such splendid gifts as the Williams Memorial Publication Fund at Yale. It is greatly to be regretted that more funds for the publication of books pertaining to medical history are not available.

HENRY VIETS.

Vol. XLII MARCH, 1921 No. 3

ALBANY MEDICAL ANNALS

Original Communications

THE ADAMS-STOKES SYNDROME.

Report of Four Cases.

By HERMON C. GORDINIER, A.M., M.D.

In the Albany Medical Annals of June, 1906, I discussed the subject of the so-called Adams-Stokes disease from a clinical and pathological viewpoint and recorded three typical cases. Now I wish to report four cases clinically, two of heart-block with complete disassociation; one of transient auricular flutter with a three-to-one block, and one of extra-systolic arrhythmia, each presenting the nervous manifestations characteristic of the Adams-Stokes syndrome. If one refers to the literature it will be noted that while the majority of the cases presenting this symptom-complex are due to partial or complete heart-block of a permanent or temporary nature, rare cases are recorded which have other physiologic, anatomic or pathologic association. I have noted syncopal attacks with epileptiform convulsions in two cases of sinus bradycardia and in a case of aortic stenosis with a pulse rate of fifty and no defect of conductivity. In the article above referred to references are made to cases due to vagus slowing from compression of new growths, abscess or cysts of the oblongata or pons or upper cervical cord lesions.

Sir James Mackenzie has recorded three cases of nodal bradycardia, each presenting the Adams-Stokes symptoms. Lewis refers to certain rare cases of early premature contractions with marked slowing of the pulse associated with this syndrome.

Walter James reported in 1908 a case with syncopal attacks resembling the Adams-Stokes syndrome due to recurring groups of ineffectual extra-systoles, and James Mackenzie has recently reported a remarkable case of this syndrome in a patient with auricular flutter. Fibrillation of the ventricles is a cause, and probably a frequent one, of fatal cardiac syncope. Robinson and Bredock have recorded a single temporary non-fatal case of ventricular fibrillation, the patient dying in one of the several attacks of syncope. Electro-cardiograms recorded in the last syncopal attack showed ventricular fibrillation. The patient lived about thirty hours.

Syncopal attacks and epileptiform convulsions, the chief nervous manifestations characteristic of this complex, are doubtless the result of cerebral anemia; in heart block this is due to a diminution or temporary lack of blood supply, due to the extreme slowness of the ventricular rate, or its immediate standstill, as recently proven by Wilson and Robinson with the electro-cardiograph during a syncopal attack in a case of heart block with the Adams-Stokes syndrome. According to Lewis, if standstill of the ventricles lasts but two or three seconds, there is but little disturbance if standstill exists for a longer period, three to five seconds, momentary loss of consciousness occurs; if the ventricle fails to beat for longer periods—fifteen, twenty or more seconds—twitchings or convulsive movements appear with loss of consciousness; if the heart beat is in abeyance for ninety to one hundred and twenty seconds, recovery is rare.

In the rare cases of auricular flutter where these symptoms have been observed they are probably due to the greatly diminished ventricular output, the result of too rapid rate and shortened diastoles from myocardial insufficiency.

A diminished blood volume output is the probable explanation of the syncopal and convulsive attacks occurring, as in the case herein recorded, with more or less continuous ineffective ventricular extra-systoles.

Kussmaul and Jenner in 1859 were able to induce these general nervous manifestations by compression of the carotid arteries in adult males, and they were unilaterally produced by Schiff in 1858 and by Leonard Hill in 1900.

CASE I. A CASE OF CARDIO-VASCULAR RENAL DISEASE WITH THE ADAMS-STOKES' SYNDROME, PROBABLY DUE TO COMPLETE HEART-BLOCK FROM A LESION (FIBROSIS?) OF THE KENT-HIS BUNDLE. DEATH. NO AUTOPSY.

April 14th, 1916, I was called in consultation to see Mrs. R. C., 66 years of age, who the day previously while apparently in perfect health suddenly became dizzy, turned pale and fell unconscious to the ground. Her husband who witnessed her fall went to her assistance and with the aid of servants managed to get her into the house and to place her in bed. A physician was summoned and found her pale, apparently greatly shocked, with a pulse rate of eighteen per minute and very irregular. She sustained several bruises about the forehead and right temple. A few hours later, the pulse rate had risen to seventy-two per minute, was regular and she voided a large quantity of very pale urine. The following day she felt very dizzy and faint and the pulse dropped to eighteen per minute and continued at that rate for two days, with this low rate; however, there was no loss of consciousness. An interesting feature noted was that while the pulse was so slow she voided each day only a few ounces of very concentrated urine.

Family History. (Unimportant.)

Personal History. She has had the usual diseases of childhood. She never suffered from rheumatic or gouty manifestations. She has never been ill save at the birth of her children, until January, 1916, when she was taken on the way from the theatre to her hotel in New York City, with dizziness, suddenly became faint and fell to the ground unconscious. The physician who attended her in this attack stated that it was uræmic in nature and that she had chronic Bright's disease. She left New York City about the middle of January and remained perfectly well until the onset of the above described attack. At no time has she complained of præcardial anxiety, distress or pain either substernal or reflected.

The patient is a well nourished lady in the recumbent posture suffering from slight air hunger. Her lips are pale blue, otherwise her skin and mucous surfaces are rather pale. The respirations are rhythmic, full and sixteen per minute. There is no œdema.

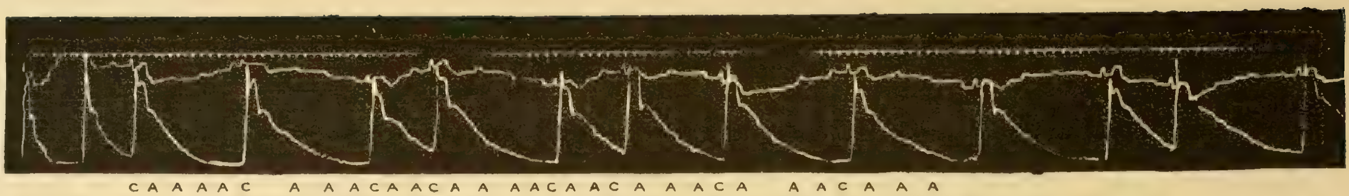
Heart. The cardiac rate both at the impulse and at the wrist is thirty per minute; its regularity is occasionally interfered with by the interpolation of a premature beat. The vessel wall does not feel thickened, the tension is well sustained. The jugulars are prominent, full and pulsate freely, their rate is about sixty-two per minute. The cardiac impulse is heaving, the clinical apex is in the fifth interspace, a centimeter to the left of the left of the mammillary line. The cardiac dullness could not be accurately mapped out because of the prominent left breast. There is slight epigastric pulsation. An occasional extra-systolic beat is heard, with, at the time, reduplication of both heart sounds. During the long diastolic pause no auricular sounds were discoverable. A soft systolic apical murmur is present, slightly conveyed to the left. The aortic second sound is loud and ringing. The average systolic and diastolic pressures were 180 and 90. Polygraphic tracings show a definite two-to-one heart block with an occasional extra-ventricular systole.

Lungs. The chest is large and voluminous, the note is hyperresonant throughout. This note largely effaces both the cardiac and liver dullness. The expiratory murmur is prolonged and low in pitch. A few moist subcrepitant rales are present at the bases posteriorly.

Urine. The urine has specific gravity 1,014, dark amber, acid, contains a large trace of albumen, no sugar, but a few leucocytes, and several hyaline and fine granular casts.

Liver. The liver is with difficulty outlined, its dulness appears at the lower border of the sixth rib; because of the thick abdominal parietes the inferior border is not palpable. The abdomen is large and tympanic throughout.

April 18, 1916. I again visited her and found her condition about as above described. The day previous, however, her pulse suddenly dropped to eighteen per minute, she became ashen, felt faint, and was short of breath and temporarily lost consciousness. Today her pulse is twenty-eight, regular and without extra beats. The jugular count varies from fifty-six to eighty-four per minute. Polygraphic tracings show both a two-to-one and a three-to-one heart block. Probably a complete disassociation. Until her death, April 29, 1916, her pulse rate ranged between eighteen and thirty-six per minute, when at its lowest speed she complained bitterly of faintness and then the slightest physical exertion or change of posture would bring on syncopal attacks. The urinary output seemed dependent on the rate and volume output of the heart, for when the pulse would suddenly drop the output became almost negligible to rise again with an increase of the cardiac rate. Three days before death she had a severe syncopal attack, became unconscious, was very cyanosed, the pulse was absent at the wrist. After returning to consciousness she seemed very weak, was deeply cyanosed, her respirations assumed the Cheyne-Stokes type and her pulse rate was but sixteen per minute. The urine, scant in amount, was voided involuntarily. She was restless, very dyspnœic, disoriented and delirious; later her pulse rate ranged between eighteen and twenty-six per minute. A few hours preceding death she became comatose and her pulse gradually increased in rate to sixty-eight per minute. No autopsy was permitted.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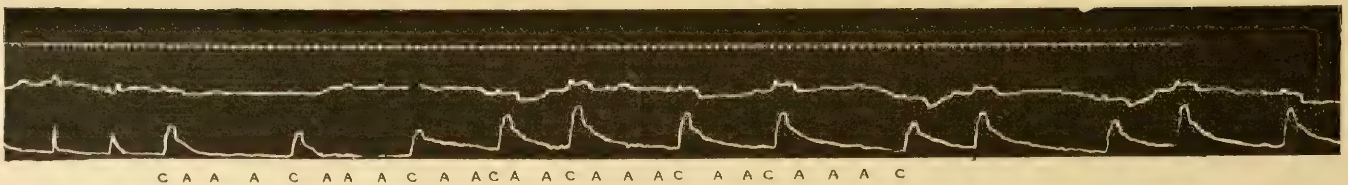
Case I. Adams-Stokes Syndrome.—Radial rate, 28; complete heart-block; "disassociation."



Case II. Adams-Stokes Syndrome.—Pulse rate, 28; jugular rate, 84; probably complete heart-block; "disassociation."

CASE II. THE ADAMS-STOKES SYNDROME ASSOCIATED WITH HEART-BLOCK. PARTIAL RECOVERY WITH BUT SLIGHT DEFECT OF CONDUCTIVITY.

July 27, 1917. Mr. John L. B. Age, 48 years; occupation, merchant. Seen in consultation with Dr. Dunham of Gloversville, N. Y.

Family History. Father died at the age of seventy-seven years of apoplexy; mother died at the age of 60 years of cancer of the breast. One brother died of diphtheria. Two brothers living and in good health.

Previous History. Had when a boy several attacks of rheumatic fever, denies venereal disease. In recent years he suffered from both lumbago and sciatica. Fifteen years ago he had an attack of appendicitis for which he was successfully operated, otherwise he had been well until the onset two years ago of an attack exactly similar to the present one. It began at that time with dizziness, a staggering gait with a tendency to fall, and marked dypsnœa on exertion. These premonitory symptoms continued for a fortnight when in the night he was suddenly seized with a faint attack, became very pale, his eyes rotated upward and outward, and he became temporarily unconscious. The following morning his physician found him pale, much exhausted, and dypsnœic, with a pulse rate of but twenty per minute and regular. Within a week his pulse rose to thirty-four and continued at that rate for about three weeks when it reached forty per minute. Six weeks later it had gradually attained the rate of sixty-eight. Having become much improved his physician sent him south to convalesce, where he remained several months. While in the south he had several mild attacks of a similar nature to the above described but without loss of consciousness, his pulse only dropping to forty per minute, soon thereafter it regained its normal rate of sixty-eight. On his return his pulse ranged from sixty-eight to seventy-two, was regular in rythm and no evidence of cardiac disease was discernible. He appeared perfectly well for eighteen months, attending to a large business, ate and slept well and expressed himself as being strong and healthy.

July 16. 1917. He felt strange, noticed that his pulse had dropped to forty, became slightly dizzy and on going upstairs or a slight rise would become short of breath. This pulse rate of forty continued for four days when he suddenly became very faint and weak, turned ashen, his eyes were rotated upward and outward and he had a slight convulsion followed by a brief period of unconsciousness. Just before this attack he counted his pulse at thirty-two per minute. He has had no subsequent attacks. His physician who saw him a half hour after the attack was over, found his pulse rate twenty, which rate gradually increased to twenty-five per minute. For the past week his pulse has ranged from twenty-five to thirty-two per minute.

Physical Examination. Mr. B. is a well nourished man in the recumbent position without œdema or cyanosis. The skin and mucous surfaces are rather pale. The pulse is beating regularly at twenty-eight per minute, it is full but easily compressed and seems of low tension; the vessel walls are not palpably thickened. The jugulars are full and pulsate freely; with a stop watch, I was able at times to count the rate at fifty-six and then again at eighty-four per minute.

Heart. The apex is not visible or palpable; no thrill or friction is discernible or retraction of the intercostal spaces. The cardiac dulness begins above at the upper level of the fourth rib and extends to the left from the mid-sternal line to the left mammillary line, otherwise the cardiac area is effaced by a hyperresonant note. At the apex a very soft systolic murmur is heard, faintly conducted to the left. The first sound is present but distant and faint. The pulmonic second sound is accentuated. The aortic second sound is clear but not ringing. No basic murmurs were detectable. During the interval between each radial beat, auscultation disclosed no sounds over the præcordium. Polygraphic tracings disclosed a typical heart-block with a two-to-one and a three-to-one rate, probably complete disassociation between the action of the auricles and ventricles. The systolic blood pressure was 160 m.m., Hg; the diastolic, 100.

Lungs. The chest is voluminous, the intercostal spaces are effaced, the note is hyperresonant throughout. Good vesicular murmur is present save in the infra-clavicular regions where the expiration was prolonged and low in pitch.

Liver. The liver dulness extended from the upper border of the sixth rib in the right mid-clavicular line to one and one-half centimeters below the costal border, its palpable margin is smooth and not unusually firm or tender.

Kidneys. They were not palpable.

Abdomen. The abdomen was prominent, universally tympanitic and no herniæ were present.

Rectum. The prostate gland is slightly enlarged.

Nervous System. The pupillary, patellar, tendo-Achillis and superficial reflexes are normal. The organic reflexes are preserved. The mind is clear, gait and station normal. No objective sensory disturbances were discovered.

A letter from his physician states that he has improved and that his pulse rate has gradually reached fifty-six per minute. He has had no syncopal attacks, no faintness or dypsnœa. The most careful examination on several occasions of his urine failed to disclose any abnormal condition. The blood Wassermann reaction was negative.

December 28, 1917. Patient visited me in Troy. The examination disclosed a pulse rate of sixty, rythm regular. I could distinguish no definite jugular pulsation. S.B.P., 135; D.B.P., 90. Heart-sounds clear, no adventitious sounds. He is able to attend to his regular business duties without discomfort or dypsnœa. He has had no præcordial anxiety, no dizziness or faint feeling. He has been taking both atrophine and strychniæ for several weeks with, he believes, much benefit.

Electro-cardiograms show normal complexes with only a diminution of conductivity, the A. R. interval measuring about 0.3 seconds.

CASE III. RECURRING SYNCOPAL ATTACKS ADAMS-STOKES SYNDROME PROBABLY DUE TO CEREBRAL ANAEMIA OCCURRING TOWARD THE CLOSE OF A CONVALESCENT PERIOD OF A CASE OF TYPHOID FEVER, THE RESULT OF TRANSIENT AURICULAR FLUTTER. RECOVERY.

Mr. John Y., age 35 years, entered the Samaritan Hospital January 28, 1917, in a delirious state, complaining at lucid intervals of severe headache, pain in the abdomen and great weakness.

Physical Examination. He is well nourished, without œdema, his skin is hot and dry, pulse quickened, but regular, tongue fissured, dry and brown and sordes has collected on his gums, lips and teeth. He talks incoherently, is disorientated and very stupid.

Lungs. At the right base the physical signs of consolidation exists, elsewhere harsh but fair vesicular breathing was elicited.

Heart. The cardiac dulness is normal, sounds clear but distant, rythm normal, rate 90; S.B.P., 120; D.B.P., 90.

Liver. Dulness extends from the fifth interspace to two centimeters below costal border in right mammillary line; the lower border is smooth and not tender.

Spleen. Is palpable two centimeters below costal margin. It is definitely tender to the touch.

Abdomen. Is universally tympanitic and distended. It is tender in the right lower quadrant. Rose spots are abundant on the abdomen and chest.

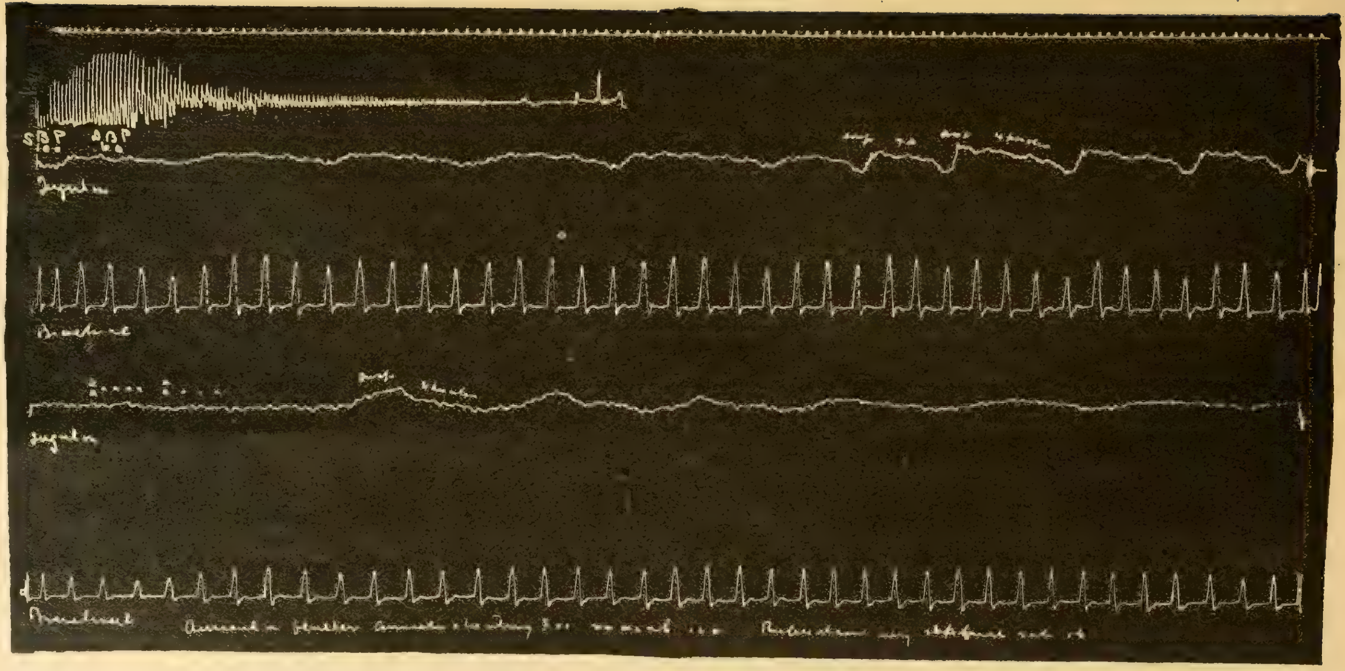
Nervous System. Cranial Nerves. The pupils are mid-wide, equal, responsive to light and accommodation, the discs are normal.

The patellar and tendo-Achillis jerks are lively.

The umbilical reflex is absent. The bladder and rectum are not controlled.

Laboratory Findings. The urine is cloudy, the specific gravity is 1.022, albumen in definite amount is present, no sugar, leucocytes, erythrocytes, or bladder epithelium are present, numerous motile organisms were seen. The Widal agglutination test is positive. The Wassermann reaction is negative. The red cell count was 3,250,000; the white cell count, 5.200; hæmoglobin sixty per cent.

The patient's temperature ranged for a period of about six weeks from 102° to 104°. During the third week of the disease he had three



Case III. Adams-Stokes Syndrome.—Auricular flutter occurring suddenly during the convalescence of a very severe case of typhoid fever. Auricular rate, 300; radial rate, 100. Normal rhythm restored in five days with digitalis.

large intestinal hemorrhages which nearly cost him his life but they were controlled and though his condition was desperate for days he gradually improved. At the beginning of the seventh week, he developed a sharp attack of facial erysipelas which was easily controlled with icthyol,

A few days later his temperature and pulse fell to the normal, his mind became clear, he appreciated his surroundings and his appetite became ravenous. He was much emaciated, having lost thirty pounds in weight.

Suddenly while in the recumbency he was taken with a faint attack, became very pale, the pupils were widely dilated and his eyes were turned upward and outward under the cover of the upper lid; he was absolutely unconscious but had neither muscular twitchings nor convulsions. The attack lasted about five minutes; when he returned to consciousness he was bewildered and disorientated, his pulse was rapid but regular, respirations quickened and he was quite cyanosed.

He had five attacks of a similar character during one week. I saw him in his last attack which was exactly similar to the one above described. His pulse was regular, feeble in volume, easily compressed, with the rate of 100, his jugulars were pulsating very rapidly, a series of fluttering wavelets which, with a stop watch were counted at about 300 per minute. Polygraphic tracings were immediately taken which showed an auricular rate of 300, with regular rythmic ventricular responses of 100 per minute, three-to-one heart block. His systolic blood pressure was 100 m.m., Hg.; the diastolic, 60 m.m., Hg.

He was given twenty minims of tincture of digitalis thrice daily for six days when the normal rythm was re-established.

Three weeks later he was discharged, having had in the interim no return of the flutter.

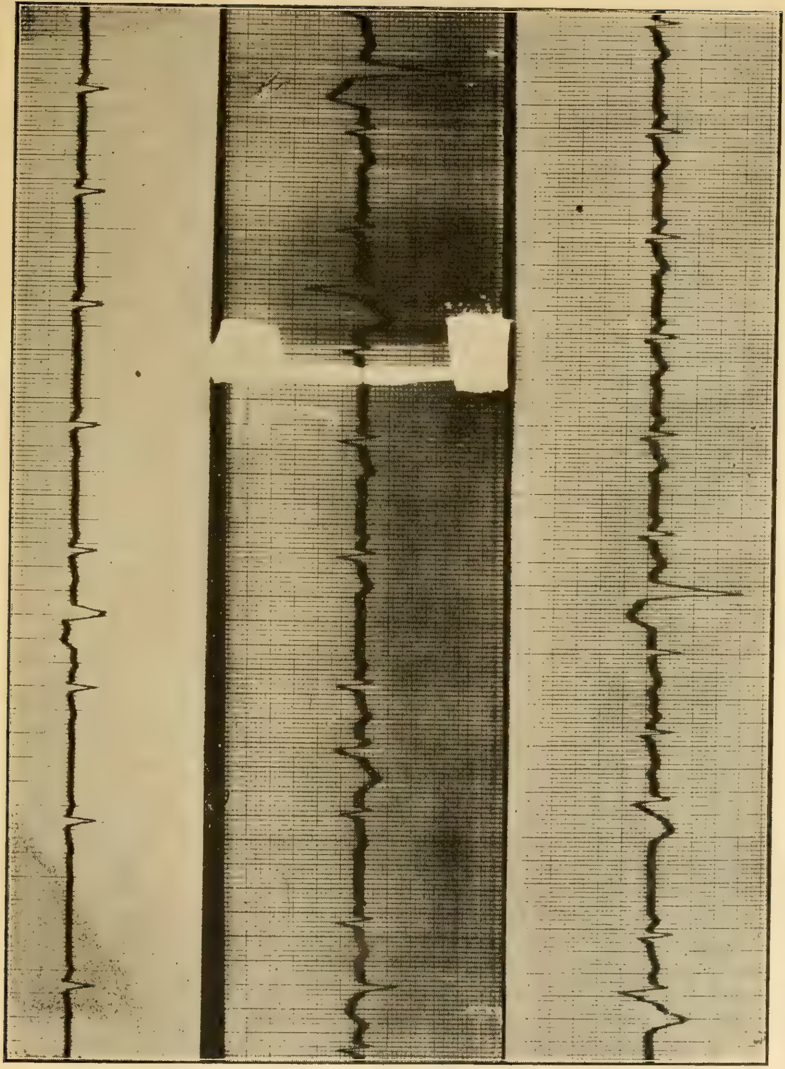
CASE IV. A CASE OF CARDIO-VASCULAR DISEASE WITH FALSE BRADYCARDIA DUE TO INEFFECTUAL EXTRA-SYSTOLES ASSOCIATED WITH SYNCOPAL ATTACKS RESEMBLING THE ADAMS-STOKES SYNDROME

Mr. F. F. entered the Samaritan Hospital October 14, 1920, complaining of great weakness, unproductive cough, faint attacks, dyspnœa on exertion, substernal pain reflected down the left arm, and insomnia.

The *Family History* is without import.

Personal History. He has had the usual diseases of childhood. He never recalls having had rheumatism, pleurisy or pneumonia. He denies all venereal taint. He is not subject to tonsilitis or sore throat.

The present illness began in the autumn of 1919, when suddenly, following a slight cold, he had a faint attack, fell unconscious to the floor, and remained so for about thirty minutes. When he awakened he was distressed with a curious action of his heart. He states that preceding



Case IV. Adams-Stokes Syndrome.—Electrocardiogram showing extraventricular systoles from two independent foci, and definite broadening of the R- and S-waves in all leads.

the attack he had had no præcordial pain or anxiety, but had noticed what he described as a peculiar thumping of the heart. Following this attack he has had at variable intervals faint spells but without loss of consciousness.

Examination. The patient is tall, of medium build, without œdema, but with slight cyanosis of the lips and fingers. The eyes are prominent, his expression anxious, and he suffers from dyspnœa. The throat and nose show a moderate naso-pharyngeal catarrh. The tonsils are small and imbedded.

Lungs. The chest is rather flat. The movements are symmetric. The percussion note save at the bases posteriorly is normal. There are a number of subcrepitant rales in the subscapular regions.

Heart and Blood Vessels. The cardiac impulse is visible in the fifth interspace at the junction of the mid-clavicular line. It is a diffuse feeble tap. There is a distinct epigastric pulsation. Dulness begins above at the third rib and extends thirteen and one-half centimeters to the left and two centimeters to the right of the midsternal line. At the impulse a soft systolic murmur is heard, conducted to the left as far as the anterior axillary line. Extra-systoles are present following every second or third normal beat. The apical systolic murmur and first heart sound are repeated with each ectopic beat. The second sound however is not heard at the time of the occurrence of the ectopic beats, showing that these beats are ineffectual to lift the aortic valve and that the intraventricular pressure is too feeble to overcome the aortic. The pulse rate ranges between forty and sixty per minute. The cardiac rate, as determined by auscultation, ranges at about eighty per minute. It is perfectly evident that most of the extra beats are ineffectual and do not reach the periphery. These ectopic beats are only indicated by definite true pulse intermissions, extra pulse waves not being palpable. The jugular veins are prominent and pulsate simultaneously with many of the extra-beats.

The electrocardiograms show in all three leads extra-ventricular systoles arising from two independent foci. They also show definite widening of the R-wave in leads 1 and 2, and also of the S-wave in lead 3—probably indicating slight defects in ventricular muscle conductivity.

Four cases are recorded: two of heart block with complete disassociation: one of auricular flutter and one of extra-systolic arhythmia, each presenting the complex of symptoms charactertistic of the so-called Adams-Stokes' disease.

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"PREVENTIVE MEDICINE IN THE TIME OF MOSES."

By C. W. WOODALL, M. D.

In recent months there have been waves of enthusiasm for "Preventive Medicine" apparently taking their source from the wind of propagandists on the troubled sea of post-bellum unrest. They would have us believe that this ounce of prevention is a new remedy for a great proportion of human ills, that applied in industries it will reduce sickness to a minimum. Perhaps it will. It is not my purpose or desire to enter a controversy upon the relative value of preventive medicine, and I fully appreciate the marvelous advance made in the control of certain epidemic and endemic diseases. It is rather my aim to refresh our memory as to the really ancient times when preventive medicine was practiced in a way remarkable both for the amount of knowledge displayed and for the systematic way in which it was carried out. No less remarkable is it that this preventive medicine was largely the product of the mind of one man. A man so unusual in a diversity of attainment that he has stood out in history almost in a class by himself.

Let us turn back the pages of history for thirty-five centuries and glance at the character of this interesting individual. Born of humble Jewish parentage, saved from the slaughter of Jewish male infants by a ruse that either through a fortunate trick of fate or by divine providence (as you will) landed him in the very household of Pharaoh as a petted protege. Educated in the temples by priests, he soon became their master, not only in science but in mysticism, sorcery, and the arts of the charlatan. Trained in military tactics of the Egyptians he later out-generaled the forces of the king, and triumphantly led his race from the bondage of generations to freedom and the establishment of a great nation. Such a man was Moses.

Perhaps men of science have not fully appreciated the qualities of this great leader. His constant indulgence in the practice of sorcery and his claims of intimacy with Jehovah have undoubtedly prejudiced thoughtful minds. In nearly every chapter of laws given to the Hebrews we find the preface "The Lord said unto Moses," or "Thus saith the Lord." Undoubtedly Moses was justified in using this means to impress a credulous, ignorant and superstitious people. At least we are forced to admit that he accomplished his purpose.

Moses was not a physician by profession and yet he probably knew more about disease and its control than most of his contemporaries. The laws he made to promote hygiene, both personal and collective, would today improve the health of any community if carefully adhered to. His strict control of the Hebrews' diet went far toward making them a race with unusual stamina and endurance. His sane marriage laws by elimination of consanguinity reduced insanity and congenital deformities to an almost negligible factor.

His isolation of skin and infectious diseases showed a discernment that was remarkable for the period in which he lived. His regulations for camp sanitation, garbage and waste disposal were most stringent.

These laws for the promotion of health were inseparably connected with religious rites and the breaking of the laws carried a penalty of sacrifice. Their enforcement was in the hands of the priests and the priests retained part of the sacrifices for their own use.

That Moses recognized the danger of food infection is indicated by the measures he took to guard his people from that source. The following are among his precepts for food consumption:

" The flesh that toucheth any unclean thing shall not be eaten." Lev. VII, 19. " The fat of the beast that dieth of itself and the fat of that which is torn with beasts, may be used in any other use, but ye shall in no wise eat of it." Lev. VII, 11.

" And whatsoever man there be of the children of Israel or of the strangers that sojourn among you, which hunteth and catcheth any beast or fowl that may be eaten; he shall even pour out the blood thereof, and cover it with dust."

" For it is the life of all flesh: the blood of it is for the life thereof: Therefore, I said unto the children of Israel, ye shall eat the blood of no manner of flesh: for the life of all flesh is the blood thereof: Whosoever eateth it shall be cut off." Lev. XVII, 13, 14.

In the eleventh chapter of Leviticus Moses indicates with infinite pains those animals, birds, fish, etc., which may and may not be eaten. With few exceptions that law is followed today.

In regard to personal and collective hygiene, the laws were far more rigid than those commonly observed now. If a Jew touched anything " unclean " either accidentally or through necessity he must wash not only his body but his clothes and remain out of general contact until the evening. Laws of sexual hygiene were most stringent and careful rules were laid for the " purification " of women following menstruation and child birth. The " purification " following menstruation lasted seven days, that following the birth of a male child 33 days, and that following the birth of a female child 66 days, in each case being terminated by a sacrifice or burnt offering.

Apparently Moses knew but little of the application of therapeutic agents. His treatment was prevention by laws of sanitation and a supreme trust in nature. His regulations were both wise and sane in the control of diseases known to him. He was apparently familiar with syphilis and expelled the victim of it until there were no external or objective symptoms. His observations of leprosy were in the main true and his precautions to prevent its spread, masterful. The diagnosis was made by the priests in the interesting manner that is here quoted:

" When a man shall have in the skin of his flesh a rising, a scab, or bright spot, and it be in the skin of his flesh like the plague of leprosy; then he shall be brought unto Aaron the priest, or unto one of his sons the priests:

" And the priest shall look on the plague in the skin of the flesh; and when the hair in the plague is turned white, and the plague in sight be deeper than the skin of his flesh, it is a plague of leprosy: and the priest shall look on him, and pronounce him unclean."

" If the bright spot be white in the skin of his flesh, and in sight be not deeper than the skin, and the hair thereof be not turned white; then the priest shall shut up him that hath the plague seven days:

" And the priest shall look on him the seventh day: and, behold, if the plague in his sight be at a stay, and the plague spread not in the skin then the priest shall shut him up seven days more:

" And the priest shall look on him again the seventh day; and, behold, if the plague be somewhat dark, and the plague spread not in the skin, the priest shall pronounce him clean; it is but a scab: and he shall wash his clothes, and be clean.

" But if the scab spread much abroad in the skin, after that he hath been seen of the priest for his cleansing, he shall be seen of the priest again:

" And if the priest see that, behold, the scab spreadeth in the skin, then the priest shall pronounce him unclean: it is a leprosy."

The home and clothing of a leper were destroyed. Moses evidently recognized the possibility of the disease being spread by articles which had come in contact with the leper for he instructs in Leviticus XIV, 34, 35.

" When ye come into the land of Canaan which I give to you for a possession, and I put the plague of leprosy in a house of the land of your possession, he that owneth the house shall come and tell the priest, saying, it seemeth to me there is as it were a plague in the house."

The law then states the procedure the priest shall undertake to determine the presence of leprosy. If in his opinion there has been leprosy in that dwelling, the following instructions were carried out.

" And he shall break down the house, the stones of it, and the timber thereof, and all the mortar of the house, and he shall carry them forth out of the city into an unclean place. And he that lieth in the house shall wash his clothes, and he that eateth in the house shall wash his clothes." Lev. XIV, 45-47.

Infections with an accompanying discharge of pus were recognized as a real source of danger to the general public health. Bacteria, of course, were unknown, and Jehovah in all his wisdom apparently did not feel called upon to acquaint Moses with the etiological factor of infection,—but listen to this admirable advice, you who are interested in preventive medicine: " And the Lord spake unto Moses and to Aaron, saying,

" Speak unto the children of Israel and say unto them, when any man hath a running issue out of his flesh, because of his issue he is unclean.

" And this shall be his uncleanness in his issue: Whether his flesh run with his issue, or his flesh be stopped from his issue, it is his uncleanness.

"Every bed whereon he lieth that hath the issue, is unclean: and every thing whereon he sitteth shall be unclean.

"And whosoever toucheth his bed shall wash his clothes, and bathe himself in water, and be unclean until the even.

"And he that sitteth on anything whereon he sat that hath the issue shall wash his clothes, and bathe himself in water, and be unclean until the even.

"And he that toucheth the flesh of him that hath the issue shall wash his clothes and bathe himself in water, and be unclean until the even.

"And when he that hath an issue is cleansed of his issue; then he shall number to himself seven days for his cleansing, and wash his clothes, and bathe his flesh in running water, and shall be clean."

Many other passages of this interesting Pentateuch bearing on the subject of Preventive Medicine might be quoted. If you are not familiar with these writings of Moses let me recommend them not only as being a most interesting chapter in the history of medicine, but in addition a character sketch of a great statesman, law giver and leader of men.

To conclude. In the time of Moses, Preventive Medicine was a factor of great importance in the life of the community. The lack of detailed knowledge concerning the etiology and treatment of diseases made it even more imperative then than now to stop the spread of contagious disease in its incipiency.

Our modern conception of Preventive Medicine embraces mainly two branches:—first, that dealing with the general rules of hygiene, and second, the various methods of immunization. As regards the first, the fundamental rules of hygiene have been but little altered through the centuries. As regards the second, immunization by vaccines, etc., is by no means universally applicable under modern working conditions. To offset our increased technical knowledge we have to deal with the highly artificial and often crowded conditions of modern industrial civilization with such disturbing factors as the often rapid fluctuation between relative plenty and widespread unemployment. Again in this age of free thought, hygiene cannot be enforced by religious dominance. In that respect Moses had an advantage which can never be equaled by secular law. In estimating the future possibilities of Preventive Medicine, I believe that we should not look wholly to the future for our guidance; the experience and failures of the past should give us valuable data upon which to base a true perspective.

THE DIFFERENTIAL DIAGNOSIS BETWEEN TUBERCULOSIS OF THE HIP AND OSTEOCHONDRITIS DEFORMANS JUVENILIS (PERTHES) OR OSTEOCHONDRAL TROPHOPATHY OF THE HIP JOINT (LEGG).

By JOHN M. BERRY, M. D.

From the Roentgen Ray Department, Albany Hospital.

Perthes (1) and Legg (2) have so clearly described a peculiar pathological condition of the hip joint occurring in children and its associated symptoms and course that there can be no doubt as to its clinical entity.

Perthes has suggested that the condition be known as Osteochondritis Deformans Juvenilis, while Legg suggests the name Osteochondral Trophopathy of the Hip Joint.

It would seem that Legg was the first to report cases of this character (June, 1919, Meeting of the American Orthropedic Association), but they were not generally recognized until the appearance of Perthes' Classical Monograph in 1913. Although Perthes called the new disease Osteochondritis Deformans Juvenilis, it is now commonly referred to as Perthes' Disease.

The symptoms of Perthes' Disease suggest somewhat the presence of a juvenile arthritis deformans, but what is much more striking is the similarity to tuberculosis of the hip. Perthes' Disease has undoubtedly frequently been mistaken for tuberculosis of the hip and often may have been the explanation of what have been reported as remarkable cures of tuberculosis.

Perthes' Disease runs its course in about a year and requires treatment only for that time. The end result is usually a nearly

To Illustrate Dr. Berry's Article on "Tuberculosis of the Hip"

Albany Medical Annals, March, 1921

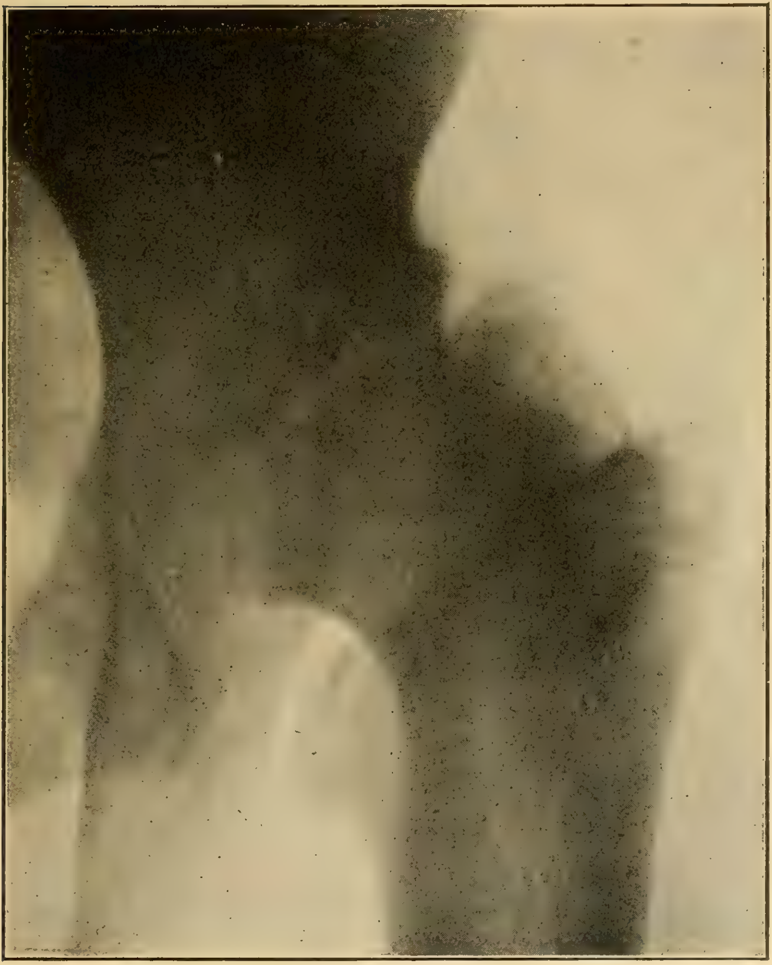

FIG. 1. Old Tuberculosis of the Hip.

perfectly functionating hip joint with little or no apparent deformity. Tuberculosis, on the other hand, requires anywhere from two to six years of treatment to attain anything like a successful result and the end result is usually bony ankylosis of the hip with considerable deformity. The character of the treatment is somewhat the same, although much more thorough and prolonged in tuberculosis. To treat a case of Perthes' Disease as a case of tuberculosis means that the patient is subjected to a long, severe course of treatment, totally unnecessary and probably harmful in its effect on the growing hip joint. It is therefore very important that a differential diagnosis between the two conditions should be made as early as possible.

The symptom complex of Perthes' Disease, compiled from the observations of Perthes, Legg, and others, is as follows:

1. Occurrence—2-13 years of age.
2. Onset—with pain or limp, sometimes history of trauma.
3. Prominence of great trochanter.
4. Limitation of motion.
5. Little or no pain, but pain is sometimes present.
6. Capsular thickening.
7. Little or no spasm, but spasm is sometimes present.
8. Trochanter above Nelaton's line, positive Trendelenburg sign.
9. Legs usually equal in length, but there may be exceptions.
10. Muscular atrophy.
11. No crepitation.
12. Von Perquet test negative.
13. Wassermann and Leutin tests negative.
14. No evidence of rickets.
15. Roentgen-ray appearance—atrophied, flattened epiphysis, caplike or mushroom in shape; focal spots of diminished density, at times suggesting fragmentation; hypertrophic thickening of the neck of the femur, with apparent coxa-vara: Acetabular modification in accordance with the change in epiphysis in the late stages.

From a study of the above table it can be seen that the chief points of difference between Perthes' disease and certain cases of tuberculosis of the hip is in the Von Perquet reaction and in the roentgenological appearance.

There is no doubt but what in the great majority of cases, if not in all cases, a thorough tuberculine test, and by that is meant not only a Von Perquet test but a subcutaneous injection of Koch's old tuberculin sufficiently strong to give a local increase in symptoms, must be used to serve as a diagnostic index between the two affections in question. There are cases, however, when such a method would be very dangerous to the patient. Sometimes it is a question whether tuberculosis of the hip will quiet down with recovery, or whether abscess formation will take place. In such cases an injection of tuberculin for diagnostic purposes might turn the scale in favor of abscess.

A guide to the use of tuberculine would be of great value, and from a comparison of roentgenograms of tuberculosis of the hip and Perthes' disease, it would seem that the roentgenological appearance is such a guide. (See Fig. 1-Fig. 2.)

A table outlining the difference in the roentgenological appearance of tuberculosis of the hip and Perthes' disease is as follows:

	Tuberculosis of Hip	Perthes' Disease
In early stages but after onset of symptoms.	Negative.	Bony change present. Mushrooming of epiphysis—Cap fragmentation.
Later stage.	Typical smudged appearance of joint. No coxa-vara. General breaking down of joint. Clearing up of Roentgenological appearance.	Same as above. Apparent coxa-vara. No general breaking down of joint. Disappearance of apparent fragmentation. No ankylosis.

Summary. Given a case which, from its history and physical examination, suggests Perthes' disease or tuberculosis of the hip, have a roentgenogram made and if the roentgenological appearance suggests Perthes' disease, test with tuberculine to the limit.

REFERENCES

(1) Verhandl. d. Deutsch Gesellschaft. f. Chir., Berl., 1913, XLII 2.
(2) Surgery, Gynecology and Obstetrics, 1916, Vol. XXII-Number 3.

PERTHES' DISEASE.

By JOHN M. BERRY, M. D.,

From the Roentgen Ray Department, Albany Hospital.

Tuberculosis of the hip in children and juvenile arthritis deformans are fairly common conditions and each has a characteristic system complex and course. Various observers in the past have noted atypical cases that they have classified under one or the other of these headings. In 1909 Legg (Boston Medical and Surgical Journal, February 17, 1910) described five cases.

In 1910 Perthes classified some atypical cases under the head of juvenile arthritis, but in 1913 he definitely separated them into a group by themselves and established a clinical entity which he suggested be known as Osteochondritis deformans juveniles but which is now commonly referred to as Perthes' Disease.

From the descriptions and researches of Perthes and others it would seem that Osteochondritis Deformans Juvenile is a definite disturbance of growth in the upper end of the femur which results in a peculiar atrophy of the epiphysis and a slight degree of coxa-vara.

The disease would seem to be rare but occurs often enough to make possible serious mistakes in diagnosis. The condition as reported is much more common in boys than in girls, the proportion being about four to one. The age of onset is from about the fourth to the twelfth year, and is almost always unilateral.

Pathology. The pathology of the condition is based upon X-ray findings and upon a single case operated upon by Perthes.

In the early stages the X-ray findings may be negative, but later there can be seen an irregularity of the epiphyseal line and flattening of the epiphysis. Following this there is an apparent partial breaking up of bone substance with slight spots or gaps between the upper surface of the head and the epiphyseal line. The appearance is that of an epiphysis fractured into several pieces. As the epiphysis becomes thinner is may mushroom outward over the neck toward the trochanter. The acetabulum shows adaptive changes, varying apparently with the changes in the head, and resulting in a widened socket. The ultimate result is a shortened and much thickened femoral neck, a broad flat

To Illustrate Dr. Berry's Article on Perthes' Disease

Albany Medical Annals, March, 1921

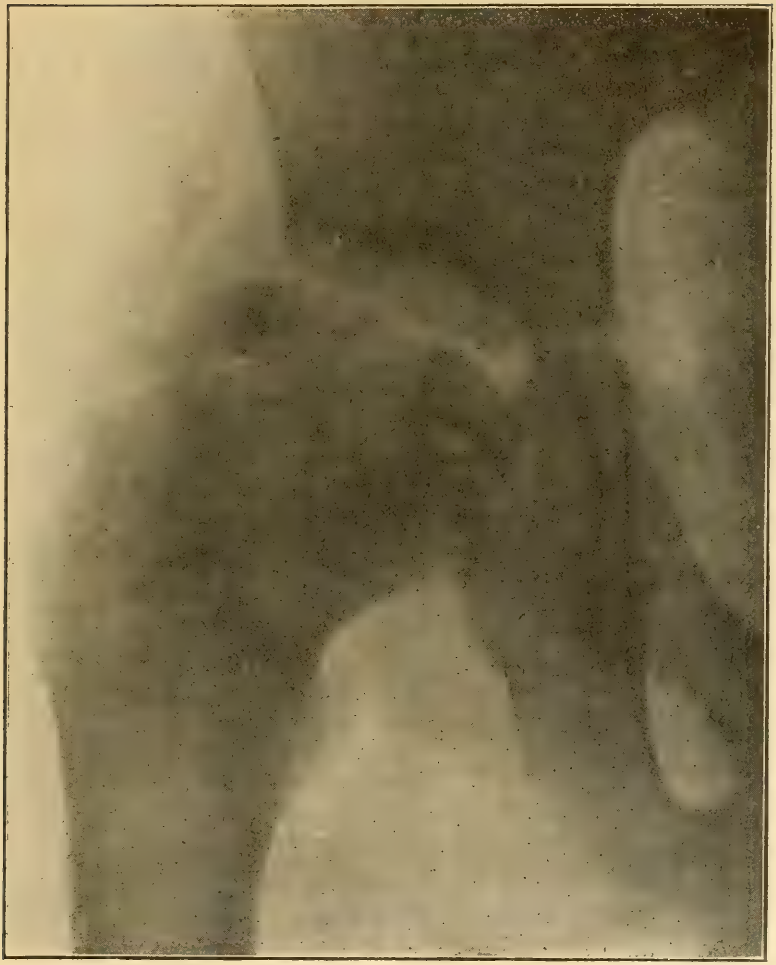

Fig. 2. Perthes' Disease.

femoral head, and a lessened femoral angle, a slight degree of coxa-vara.

Perthes found that the pathological process is inside the head of the femur without participation of the joint cartilage. The joint surface was somewhat irregular but covered with normal cartilage; there were islands of cartilage near the epiphyseal line. This explains the light spots seen in roentgenograms and the condition present is an incomplete ossification of cartilage rather than a destruction of the cephalic nucleus. The bone and marrow were normal and there was no evidence of inflammation.

Cause. The tuberculine and Wassermann tests in cases of Perthes' Disease have shown that neither tuberculosis or syphilis is the cause of the condition. The most plausible suggestion as regards the etiology is that there is a change in the circulation of the growing epiphyseal line which destroys the nice balance normally existing in the metamorphosis of the epiphysis of growing bones.

Delitalia discusses the cause of congenital coxa-vara and Perthes' Disease as follows:

"In both conditions the essential of the process is a disturbance and partial arrest of the cartilage ossification. In the coxa-vara there predominates an atrophy of the lower medial part of the neck, in Perthes' disease at the exterior upper part, but while in the first only the cartilage is affected and the cephalic nucleus, which has appeared in the third month of life, continues to develop in an irregular and incomplete manner. And since the alterations which are remarked in coxa vara correspond to the territory of one of the three terminal arteries, which according to the studies of Lexer, serve the nutrition to the upper end of the femur, and, since in Perthes' disease these correspond to the territory of the other two arteries, one can think that the same disease cause, acting now in one part and then in another, has produced the two different clinical entities."

In one case the deficiency of osseous trabeculae at the interior part of the femoral neck, which forms an important part of the pressure lines, allows the epiphysis to curve toward the lower part. In the other the incomplete ossification of the medium and upper part of the neck, weakening the mechanical traction lines, allows the epiphysis to lodge there and become crushed."

Symptoms. Perthes' disease occurs in children of good constitution and in good physical condition which is not impaired by the hip affection. The invasion is usually mild and insidious, beginning with a slight lameness and often without pain, though moderate pain in the hip, knee or groin is common at some stage of the trouble, and night cries occasionally occur. The child is seldom laid up and usually continues fairly active and goes to school. The limp is the most characteristic symptom and suggests the limp of single congenital dislocation.

On examination there may be slight shortening of the leg, a prominence of the greater trochanter, atrophy of the thigh, limited inversion and abduction and in a few cases adduction may be limited. Joint spasm is absent, slight or present only on forced motion beyond the limit of easy mobility. Trendelenburg's symptom is usually present.

Prognosis. The disturbance continues active for a more or less indefinite period, perhaps a year, but progresses to a certain termination and always ends in recovery without toxemia, enlarged glands, abscess, fixed deformity, ankylosis or serious discomfort or disability. The use of the limb is not always perfect, however, and certain permanent and characteristic joint changes remain.

Treatment. Some advise a short spica to the hip, others advise nothing but massage and stimulating treatment. It would seem wise to protect the joint for a time and be guided by the X-rays as to the proper time to stop treatment and thus avoid the long period of treatment such as is necessary in tuberculosis of the hip.

Clinical and Pathological Notes

Reports from the ROENTGEN RAY DEPARTMENT of the ALBANY HOSPITAL

Sixth X-Ray Conference—Continued from February number

Reported by
JOHN M. BERRY, M. D.

Case No.	Clinical Diagnosis	X-ray Diagnosis	Revised Diagnosis	Remarks
48				An X-ray of the wrists of a child was taken to determine whether or not the anatomical age of the child corresponded to his chronological age. The child was nine years of age but the wrist development was that of a child about six. It was also noted in this case that the mental development corresponded to that of a normal child of six. Lantern slides showing the normal wrist development for different ages were shown and the wrist X-ray pictures of a cretan aged 33 were shown, in which the wrist development corresponded to that of a child about nine.
49	Carcinoma stomach.	Carcinoma stomach.	Indurated ulcer of the pyloric end of the stomach.	Fibrosis of the entire gastric wall.

50	Pleural effusion and pneumonia.	1st Pleural effusion. 2nd Pyo-pneumothorax.	–Aspiration– Fluid containing gas producing organism Later –Operation– Rib resection pus.	The X-ray showed a gas bubble with the patient in a supine position.
	Empyema.	Massive effusion in chest.	–Operation– Rib resection-pus.	
	Pulmonary Tuberculosis.	Negative tuberculosis or empyema.	–Operation– Rib resection-pus.	
51	Tuberculosis Osteomylitis at site of old bone graft in shoulder joint.	Pulmonary tuberculosis. Osteomylitis. Breaking away of bone grafts	–Operation– Tuberculosis.	The Pathological examination showed that the bone grafts contained living bone.
52	Fracture of bone of foot.	Neoplasm at the base of the second metatarsal probably metastatic.	–Operation– Carcinoma of uterus and foot.	

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.
COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR
BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF JANUARY, 1921.

Tuberculosis	13	Grippe	0
Typhoid Fever	1	Bright's Disease	9
Diphtheria	1	Apoplexy	7
Scarlet Fever	0	Cancer	17
Whooping Cough	0	Accidents and Violence	11
Measles	1	Deaths under one year	16
Diarrheal Diseases	0	Deaths over 70	54
Pneumonia	10	Death rate (non-residents included)	15.14
Bronchopneumonia	3	Death rate less non-residents	12.28
Influenza	1		

Deaths in Institutions.

	Non-Res.	Res.		Non-Res.	Res.
St. Margaret's Home	2	1	Homeopathic Hospital	7	7
Child's Hospital	1	2	Albany Co. Hospital	0	3
Hospital for Incurables	1	2	Albany Hospital	10	7
Maternity Hospital	0	5	Ten Eyck Hotel	0	1
St. Peter's Hospital	3	5			
Home for the Aged	1	4		26	40
Albany Hospital (TB Sanatorium)	1	3	Births		195
			Still Births		4

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	0	Tuberculosis	30
Scarlet Fever	15	Mumps	5
Diphtheria and Croup	15	Pneumonia	54
Chickenpox	91	Influenza	29
Smallpox	1	Septic sore throat	2
Measles	108	Encephalitis Lothargica	2
German Measles	4	Puerperal Septicaemia	1
Whooping-cough	88	Total	445

Number of days quarantine for scarlet fever:
Longest....... 48 Shortest....... 30 Average....... 32 5/7
Number of days quarantine for diphtheria:
Longest....... 29 Shortest....... 12 Average....... 26 2/3
Fumigations:
Rooms.................... 67 Buildings.................... 24
Milk bottles disinfected.. 809

Communicable Diseases in Relation to Schools.

	Reported D.	 S.F.	 M.
Public School No. 5	..	1	..
Public School No. 8	1	..	..
Public School No. 14	1	..	2
Public School No. 15	..	..	3
Public School No. 16	..	..	6
Public School No. 18	1	..	1
Public School No. 19	1	..	..
Public School No. 20	..	..	10
High School	..	2	..
Albany Boys' Academy	..	..	11
St. Agnes' School	..	..	1
Albany Business College	..	..	2
Christian Brothers Academy	..	..	1
Lady Help of Christians	..	..	1
St. Ann's School	1	..	1
Vincentian Institute	..	2	..

MISCELLANEOUS.

Cards posted for communicable disease	140
Cards removed	79
Notices served on schools	331
Notices served on stores and factories	15
Postal card returns sent to doctors	140
Postal card returns received from doctors	79
Inspections and reinspections	165
Vaccinations	52
Vaccination dressings	42
Children examined for employment certificates	23
Number of employment certificates issued	22
Taking specimens of blood for Wassermanns	2
Taking smears for gonococci	2
Cultures	18
Inspections, midwives	7
Postal cards sent to milk dealers	72

Tuberculosis.

Living cases on record January 1, 1921		624
Cases reported:		
By card	23	
Dead cases by certificate	7	30
		654
Dead cases previously reported	6	
Dead cases not previously reported	7	
Removed	12	
Died out of town	7	
Recovered	0	
Unaccounted for	1	33
Living cases on record February 1, 1921		621
Total tuberculosis death certificates		13

Non-resident deaths:		
Albany Hospital Camp	1	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	1	
City at large	0	
Homeopathic Hospital	1	3
Resident deaths		10
Visits to cases of tuberculosis		129
Miscellaneous visits		16
Visits to physicians		16

Laboratory Report.

Diphtheria.

Initial positive	29	Release negative	216
Initial negative	198	Unsatisfactory	13
Release positive	73		
		Total	529

Sputum for Tuberculosis.

Positive	48	Unsatisfactory	0
Negative	106		
		Total	154

Widals.

Positive	2	Unsatisfactory	1
Negative	22		
		Total	25

Meningococcus.

Positive	0	Negative	0
		Total	0

Wassermann tests	293	Gonorrhoea Examinations	82
(Positive 51)		(Positive 19)	
Milk Analyses	170	Miscellaneous Examinations	5
Water Analyses	0		
Pathological Examinations	0	Total Examinations	1,258

Health Physician's Report.

Cases assigned	53	Calls made	113

DIVISION OF SANITATION.

Complaints		78	Sanitary	36	
Inspections		40	Garbage collected from 1st District ....bbls.		260
Plumbing	13				
Sanitary	27		Garbage collected from 2nd District ....bbls.		260
Reinspections		44			
Plumbing	8		Garbage collected from 3rd District ....bbls.		325

HEARINGS.

Hearings	1	Cases heard	1

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections		76	Smoke	0	
Old Houses	51		Blue or red	2	
New Houses	25		Peppermint	4	
Permits issued		33	Water test	13	
Plumbing	31		Houses examined		18
Building	2		Re-examined		53
Plans submitted		2	Valid	10	
Old buildings	1		Without cause	8	
New buildings	1		Violations		0
Houses tested		19			

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	8	Cats removed	9
Dogs removed	12		
		Total	29
		Cases eggs removed	53

DIVISIONS OF MARKETS AND MILK.

Public market inspections	25	Milk cans inspected	157
Market inspections	150	Milk cans condemned	0
Fish market inspections	19	Lactometer readings	54
Fish peddler inspections	0	Temperature readings	54
Slaughter house inspections	2	Fat tests	29
		Sediment tests	14
Rendering establishment inspections	0	Chemical tests	0
		Cows examined	0
Pork packing house inspections	4	Cows quarantined	0
Hide house inspections	0	Cows removed	0
Milk depots inspected	38	Complaints investigated	4
Stores inspected	67	Oysters condemned ....gals.	35
Dairies inspected	0	Poultry condemned .....lbs.	12

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—REPORT FOR FEBRUARY, 1921.—Number of new cases this month, 203; classified economically: free, 41; bed cases, 17 prenatal, 7; dispensary soc. serv., 1; tuberculosis (pos.), tuberculosis super., 12; hospital social serv., 0; venereal social, 4; paid, 192; limited means, bed cases, 110; Metropolitan, bed cases, 51; Metropolitan prenatal, 18; industrial bed cases, 8; industrial social cases, 5; Western Union, 0. Cases carried over from last month, 644; bed cases, 103; prenatal cases, 43; dispensary social serv., 0; tuberculosis (total), 339; hospital social serv., 32; venereal, 127; industrial, 0; Western Union, 0. Classification of bed cases: Medical, 105; surgical, 6; obstetrical, 45; prenatal, 25; confinements, 39; maternity, 6, miscarriages, 0; number of babies born, 45.

Visits for Nurses.—All departments, 2,230; for bed care, 1,554; prenatal instruction, 63; tuberculosis (sup. & inst.), 91; venereal dis. instr., 80; hospital social serv., 0; general social serv., 195; for other purposes, 163; dispensary social, 3; supervision, 81.

Source of Nursing Cases.—Metro. Ats., 57; doctors, 94; nurses, 3; dispensary, 2; family or friends, 34; other sources, 13.

Disposition of Bed Cases.—Discharged recovered, 94; improved, 40; unimproved, 33; dead, 4; to other care, 42; carried, 105. Disposition of other cases: prenatal—discharged to maternity care, 49; hospital, 6; other care, 10; carried, 38; dispensary social service, dis. dispensary care, 1; carried, 0; hospital social service, discharged home, 0; dead, 0; to dispensary, 0; to Pavilion "F," 0; lost, 0; carried (dept. discontinued temp.); venereal, discharged cured, 0; temporarily, 16; to other care, 30; carried by dispensary, 39; under super., 36; under care at the House of Good Shepherd, 10; tuberculosis, discharged dead, 2; left town, 0; not T. B., 1; carried (positive) (supervision), 352. Total number of cases carried over into March, 580.

South End Dispensary Report.—Number of clinics, 98; surgical, 11; medical, 9; gynecological, 7; prenatal, 0; eye & ear, 9; venereal, 13; nerve, 4; nose and throat, 8; skin, 4; children, 8; lung, 1; children's lung (observ. clinic), 10; clinics with doctor attending, 84; without doctor attending, 14; number of new patients treated, 168; old patients treated, 670; total number of patients, 838.

Industrial Dispensary, at Huyck's Mills.—Number of clinics held, 17; number of new cases treated, 8; number of old cases treated, 122; total number treated, 130; number of physical examinations, 0.

No industrial cases are really discharged, but we do not add them on to our cases carried nor do we add on the South End Dispensary cases as carried on our general report. They are kept separate.

(Signed) FLORENCE R. NOLL, R. N.,
Acting Superintendent.

PERSONALS.—Dr. ROMEYN T. ALLEN (A. M. C. '19) after service as Resident Physician and Surgeon at the Hahnemann Hospital, New York City, has opened an office at 302 Crane St., Schenectady, N. Y., for general practice.

—Dr. STANLEY E. ALDERSON (A. M. C. '17) is in practice at 312 State Street, Albany, N. Y.

—Dr. MILTON ARONOWITZ (A. M. C. '17) has opened an office for general practice at 536 Madison Ave., Albany, N. Y.

In Memoriam

JOSEPH BARTON BETTS, M. D.

In the death on January 29, 1921, of Dr. Joseph Barton Betts of Buffalo, his friends, the medical profession and the community suffer an irreparable loss. In the special field of pathological research work, to which he had devoted a life time of study, he achieved distinction and acquired an enviable position. His opinions on matters pertaining to his particular work were widely recognized and much sought.

He was born in Brunswick, N. Y., on June 10, 1872, was a graduate of the Albany Medical College in the class of 1894 and was for more than twenty-five years on the staff of the Buffalo State hospital. At the outbreak of the late war he enrolled as pathologist to base hospital No. 23, being commissioned as captain, and served in France with this unit. He was subsequently promoted to major and it was his privilege to return to this country as commanding officer of this hospital. A kindly nature, a spirit of loyalty and a sense of justice, combined with his other sterling qualities, endeared him not only to the hearts of the entire personnel, but to all others with whom he came in contact. While in France he suffered a severe illness, from which he never completely recovered, and in an already weakened condition he succumbed to an attack of erysipelas. His death is mourned by many.

Dr. Betts is survived by two brothers, both of Troy, to which city his remains were taken for interment.

HEIMAN F. MAY.

WILLIAM L. HOLLISTER, M. D.

Dr. WILLIAM L. HOLLISTER, retired, died at his home in Austin, Minn., on February 25, 1921, after six hours' illness with acute pneumonia.

Dr. Hollister was born upon his father's farm in Sharon, Schoharie County, N. Y., on January 9, 1837. After preliminary attendance on the country schools of his neighborhood he began the study of medicine with the late Dr. H. A. Knapp, and graduated from the Albany Medical College in 1861. He first engaged in practice in Stuyvesant, Greene County, N. Y., and after two years removed to Kingston, N. Y., where he remained until 1867. He then removed to Lansing, Minn., and after four years settled at Austin where he continued in active work, both in the practice of medicine and in public office, for thirty years. At that time he wrote to his classmates in annual re-union in Albany, as follows:

"I am now sixty-four years old and think I am as robust and hearty as most of the men of my age. I am not doing much or working very hard, but am trying to enjoy the rest of my time as best I can. I often think of my college days and think I will visit the old college some time during the meeting of the Association. How it will be, time will only decide. But remember me to the members of the Association. I always think of them at their gatherings and wish I were there. Give them my warmest wishes for the future and may Heaven bless you all is my prayer."

In 1883 Dr. Hollister was elected to represent his district in the State Senate, and in the same year received an appointment as Internal Revenue Agent. In 1907 he again went to State Legislature. He served as Coroner many terms, and for many years was a Pension Examiner. He was a member of the Masonic order and an Elk. He married on January 9, 1862, Miss Mary E. Beatty, and had three sons. Dr. and Mrs. Hollister celebrated the Golden Anniversary of their wedding January 9, 1912.

George Gary Whitaker, M.D.

Dr. George Gary Whitaker died at his home in Fulton, N. Y., on February 7, 1921.

Dr. Whitaker was one of the four surviving members of the Class of 1865 of the Albany Medical College who celebrated the anniversary of their graduation at Albany on Alumni Day, May 25, 1915, an unusual and inspiring event in the history of alumni reunions. He is the last to pass away. Dr. Duncan S. Allen died December 23, 1916, Dr. Robert M. Fuller died December 27, 1919, and Dr. Thomas D. Crothers on January 13, 1918.

These four men had attained an enviable place in the practice of medicine, Dr. Crothers as a specialist and propagandist in the treatment of inebriety, and Dr. Fuller as a specialist in chemistry, toxicology, microscopic photography and the invention of triturated tablets for accurate dosage of drugs. Dr. Allen and Dr. Whitaker, following the custom of so many graduates of the Albany Medical College, accepted the obligations and the duties and the trials of country practice, and at the end of long years of faithful service were rewarded by the friendship and good-will of the communities in which they lived, and held conspicuous positions.

Dr. Whitaker was born in Fulton, N. Y., in 1842. He prepared for college at the Valley Seminary, and began the practice of medicine with his brother-in-law, Dr. Baker of Fulton. He took as first course the lectures at Burlington, Vt., and finished his undergraduate work at Albany. He began practice in New Haven, Oswego County, N. Y. In 1867, he married Miss Baker who graduated from the Women's Medical College in 1877. Husband and wife both practiced together until 1880, when Mrs. Whitaker died, and Dr. Whitaker then moved to Fulton, where he had an especially large experience in obstetric work, was Health Officer of the Town, and identified himself with the Methodist Church and all humanitarian works. He married a second time Miss Louisa A. Dean, and from this marriage there were two children.

Current Medical Literature

REVIEWS AND NOTICES OF BOOKS

The Primitive Family as an Educational Agency. By ARTHUR JAMES TODD, Ph. D., of the Department of Sociology, University of Illinois. Publishers, G. P. Putnam's Sons, New York.

There are those who say much of the waywardness of the times is due to a lack of proper discipline and education of children in the homes as a family. Those people always point back to the old times when family discipline was exact though severe. Todd would dispel this illusion and have us know that the primitive family was very loosely constructed and in most instances the children were either given to a leader for training or if the parents were a part of a tribe of boys were grouped and trained entirely apart from the family. The early parent's love for its offspring was not very strong in either the father or mother but when the tribe was living where dangers were few and food plentiful children were very welcome and were reared as pets. They were spoiled and soon abandoned their parents. Hardships resulting from difficulty in procuring food or defending against roving enemies necessitated developing the services of every member of the family and thus family life began.

Todd gives as his aim in writing the book two purposes: to furnish an outline sketch of the early evolution of the family and to present material illustrating methods and organization of primitive education. With the assistance of Professor Sumner's notes he has collected an abundance of material on a variety of phases of the primitive family, its organization and development. The chapter on parental and filial relations is very instructive and highly worth anybody's time to read and consider. The myths and legends that surround the establishment of kinship and relationship have not been entirely dispelled by our modern enlightenment as we are all aware and as we read and reflect upon how vital they were to the stability of the early family relations we can in a measure appreciate why they persist.

The book is very well written, no part of it is dull and the incidents selected to illustrate points are often as fascinating as a modern novel. We wish he could have spent more time on the biologic phase of family development.

JOSEPH LAWRENCE.

NEUROLOGY

Cruveilhier's "Tumeurs perlées."

BAILEY. *Surgery, Gynecology and Obstetrics,* 1920 XXXI, 390.

Cruveilhier first described in 1829 three peculiar tumors of the intracranial cavity and named them "tumeurs perlées." Bailey describes two more tumors, both found at operation by Cushing. These tumors are not cholesteatomata but have a definite pathology of their own. They are rarely seen in man but are frequently found in the lateral ventricles of horses. Bailey has found 62 reported in the literature, some of which, however, are more than doubtful. These tumors are usually found at the base of the brain, often beneath the pons. They are meningeal growths and not tumors of the brain tissue proper and are always found beneath the arachnoid in the pia. Grossly they resemble mother-of-pearl. They are usually solid but have irregular cavities in their center filled with cholesterine crystals.

HENRY VIETS.

Epilepsy: Roentgen Diagnosis and Surgical Treatment.

ANTON. *Jahrbuch für Kinderheilkunde,* 1920, XCIII, 69.

Anton believes that many cases of epilepsie have an organic basis, and that the cerebellum is often abnormally large. This cerebellar hypertrophy he attempts to diagnose by X-rays of the skull. Cases are cited and the X-rays are reproduced in the paper. One is not convinced by the illustrations, however, that cerebellar hypertrophy can be demonstrated by X-ray.

Three surgical procedures are recommended, all apparently performed with some success by the author. His well known puncture of the corpus callosum has been used repeatedly. Reinke reports 23 clinical improvements out of 31 cases after this operation. Another procedure is directed towards relieving the tension of the accumulated fluid in the back of the neck (presumably in the cistern magna) by massage or, if that fails, by cutting the occipito—atlantal ligament. The third operation is to split the tentorium which Anton believes will relieve the pressure in the posterior cranial fossa. This difficult intracranial procedure is not described in detail.

HENRY VIETS.

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ALBANY MEDICAL ANNALS

Original Communications

HEALTH WORK IN THE SCHOOLS OF ALBANY.

(Summary of an address before the Medical Society of the County of Albany, March 29, 1921.)

BY CLINTON P. McCORD, M. D.,
Health Director of Schools, Albany; Instructor in Educational Hygiene, Albany Medical College

In practically every American city where definitely organized and paid health service has been instituted in the schools such provision has been preceded by volunteer medical inspection on the part of local physicians; such volunteer service has had as its purpose the education of the community to the idea and the demonstration of the practical importance of such work. Albany has been no exception to the above statement; excellent volunteer service was launched by members of the local profession several years before provision was made by the city for an officially organized system; so that when the present system was initiated on March 17, 1913, under the Board of Education, the public mind had been prepared and a valuable nucleus around which to shape a proposed system already existed. When the present Health Director of Schools was appointed he found helpful ideas and suggestions amongst Albany physicians who had been earnest and enthusiastic in their advocacy of the work. This interest continued from year to year and, with the friendly advice of many other physicians of the community and the support and activity of the Womans Club and other civic organizations, rendered possible the development and extension of the various features now well recognized as the essentials of a modern program of educational hygiene. No piece of public health work can be perfected except step by step and with care to select each new feature in accord with what seems to be its relative importance and its applicability to the educational system as it exists at any particular period. In the broadening and perfecting of the system in the light of the two preceding sentences, the Superintendent of Schools and a progressive, broad-minded Board of Education obviously have been the vital forces.

As we have stated, the officially organized work was initiated on March 17, 1913, when a Health Director of Schools was appointed. On March 27 four registered nurses were named as assistants. The first report on the work was made at the close of school in June, 1913. The city had been divided into four districts with a nurse in each and work had been done in all elementary schools. During these first three months an examination of first grade children was made for defects of eyes, ears and teeth, plus a more complete examination of about half these children. Other pressing cases were handled, a system of record-keeping was evolved, and the nurses were given intensive training in their routine duties. Talks were given by the physician in all the schools in order to familiarize principals and teachers with the purposes of the work. Sixty-one pupils with contagious and parasitic diseases were located and excluded from contact with other children; 139 cases of pediculosis were cured; surgical attention was secured for 15 cases with physical defects; 23 cases received dental treatment; 63 children had their eyes refracted and secured glasses; and 200 children with other defects were gotten under the care of their family physicians. The first report carried recommendations which were at once acted upon by the Board of Education whereby provision was made for dental work and special training for mentally deficient children. The report for the year ending June 30, 1914, represents the first report covering a full year of work following the preliminary organization; this means that the close of seven full years of work occurred June 30, 1920. During these seven years certain definite changes and advances have been made in the system, and I respectfully invite your attention to the following skeleton of bare facts, knowing you will appreciate the considerable detail and routine indicated by these facts:

RECORD CARDS.

It is needless to refer to the importance of continuous and permanent records, and the work started with three essential cards; we are now using 38 blanks and forms in the administration of the work. A continuous record for each child with "follow up" and corrective work is kept at each school in alphabetical files.

NURSES.

The work was started with four nurses. In the autumn of 1916 four additional nurses were added to the staff and in January, 1921, one additional nurse was appointed. The nurses under a recent regulation of the Regents are now known as health teachers and must be specially licensed as such by the Education Department. At present the system is divided into nine districts with a nurse in each district who is responsible for approximately 1,200 children scattered in from two to three schools; this is a fair working unit.

In addition to room inspections, health talks, invesitgation of absent children suspected of being ill, rotating service in the dental dispensary, taking children to hospital dispensaries, the nurse makes many visits to the homes for the purpose of securing the parents' consent to corrective work and treatment for children with physical defect. Samples of sections of reports on the routine work of the nurses for certain periods will indicate something of the character and scope of their activities.

Reasons for exclusion of pupils from school for varying periods of time (1914):

Pediculosis	295
Scarlet fever	26
Diphtheria	20
Measles	31
German Measles	45
Mumps	11
Chickenpox	86
Whooping-cough	59
Tonsilitis and Sore Throat	75
Contagious Impetigo	35
Scabies	3

Favus	4
Ringworm of Scalp	5
Ringworm of Body	13
Conjunctivitis (simple)	39
Conjunctivitis (phlyctenular)	3

A sample list of "miscellaneous cases" seen at time of routine visits of nurse (1914):

Eczema (all kinds)	172
Acute adenitis	27
Defective hearing and discharging ears	26
Wry neck	5
Epilepsy	5
Wounds and simple impetigo	71
	306
Treatment secured	254
Emergency treatments	36
Other cases seen by nurses (including headaches, nausea, urticaria, sprains, etc.)	1,173

Sample of general statement of contagious cases (1919):

Number of cases suspected contagious disease investigated	829
Number of cases reported to Bureau of Health	326
Number of cases reported to office by Bureau of Health	1,136

A sample list of cases taken by nurses to dispensaries during 1919:

Eye dispensaries	147
Skin dispensaries	32
Nose and throat dispensaries	39
Ear dispensaries	52
Other dispensaries	337
	607
Number of cases taken by nurses to have prescriptions filled	61

Number of previous years' notified cases investigated by nurses and found to have had treatment as follows:

Eyes	103
Tonsils	34
Teeth	19
Nose	1
	157

CONTAGIOUS DISEASES.

Close cooperation exists between the office of the City Health Officer and that of the Health Director of Schools. A daily exchange of reports on contagious cases takes place; an exclusion bulletin for contagious diseases is agreed upon and conscientiously adhered to. Minor contagious skin conditions are handled without loss of school time to the child. In case of acute contagious disease daily room inspections are made and in the very few cases where the second case of diphtheria develops in the same grade routine cultures are made for the detection of "carriers." We are glad to say that in eight years there have been no epidemics of these more serious infections. During the last year, absence because of illness has been reduced to a remarkable degree, largely, we feel, as a result of the work of the pupil health organizations. Absent children, suspected of being ill are routinely visited by the nurses, as high as 1,000 such visits a month being made during the winter season. In this way considerable numbers of the minor contagious diseases are located and brought under medical attention and public health supervision that otherwise would go undetected and would help to spread these infections. Cards of exclusion from school carry on them educational literature, and in many sections of the city the prompt "follow-up" work of the nurse results in definite education of the family along public health lines.

PHYSICAL EXAMINATIONS.

First and fifth grade children have been examined each year by the Health Director with "follow-up" work by the nurses on the cases with physical defect. The aim has been to have the parents get the children under the care of the family physician, or, where the economic level was low, to the various hospital dispensaries. The past year we have altered the plan of examining first and fifth grade children and have selected most pressing cases from all grades brought to our attention after inspections by the nurses and conferences with the teachers. This seems to be a better plan and we are probably immediately locating a greater number of physically defective children in a given time than we did under the first method. One physician cannot do justice to more than about 2,000 children so that our weak spot in this feature of the work has been our lack of assistants to do physical examinations. We should have five or six assistant physicians, giving approximately two hours a day to the work. This request has been made in the Health Director's report each year for seven years. The following tabulation of ten typical physical defects with percentages for the seven years of examinations in Albany may prove of interest:

Years	1914	1915	1916	1917	1918	1919	1920
Number of Cases Examined	2715	2318	2259	2229	2148	2169	2284
Defective Vision	222	181	170	198	149	207	203
Per Cent	8.1	7.8	7.5	8.8	6.9	9.5	8.8
Defective Hearing	24	61	42	36	40	27	25
Per Cent	.9	2.5	1.8	1.6	1.8	1.2	1.1
Markedly Enlarged Tonsils	192	116	494	475	446	419	442
Per Cent	7.07	5.	21.9	21.3	20.7	19.3	19.3
Seriously Diseased Tonsils	192	116	90	102	142	151	163
Per Cent	7.07	5.	3.5	4.5	6.6	6.9	7.1
Nasal Obstruction	26	6	16	10	11	5	16
Per Cent	.9	.2	.7	4	.5	.2	7
Decayed Teeth (3 or more; or decayed 6-year molars)	1009	578	765	703	782	758	902
Per Cent	37.1	24.9	33.3	31	36.4	34	40
Poor Nutrition (Requiring medical attention)	159	116	122	115	75	83	145
Per Cent	5.8	5.	5.4	5.1	3.4	3.7	6.3
General Nervousness	360	277	332	333	278	276	245
Per Cent	13.2	11.9	14.2	14.9	12.9	12.7	10.7
Stooped Shoulders	902	473	548	521	314	246	270
Per Cent	33.2	20.4	24.2	23.3	14.6	11.3	11.8
Lateral Curvature	171	259	317	305	226	167	190
Per Cent	6.2	11.1	14.	13.6	10.5	7.7	8.2
Enlarged Cervical Nodes	189	265	228	186	150	84	104
Per Cent	6.9	11.1	10.	8.3	6.9	3.8	4.5

HEALTH CERTIFICATES.

The state medical inspection law gives the parent the privilege of having the family physician make the yearly examination of the child, and for this examination a special health certificate is prescribed. In 1914 health certificates were furnished for approximately 10% of the children; the number furnishing these certificates has decreased each year. The tabulation of these cases as reported upon by one hundred eight to one hundred sixty-five different physicians each year is here set forth under the headings prescribed in the state health certificate:

Years:	1914	1915	1916	1917	1918	1919	1920
Number of children examined by family physician	1247	1800	1326	1090	990	780	706
Number of children having:							
Defective lungs	6	1	0	0	0	1	0
Heart lesions	11	13	3	6	4	2	3
Defective glands	100	94	25	55	49	33	41
Hernia	8	21	11	5	6	3	3
Enlarged cryptic tonsils	276	254	139	85	93	48	42
Frequent sore throat	30	35	6	11	10	6	4
Chronic pharyngitis	38	24	15	3	1	9	2
Adenoids	50	65	37	44	33	12	10
Nasal spurs	28	14	6	3	4	2	6
Digestive disturbances	0	1	1	0	0	0	0
Poor nutrition	2	3	0	0	2	0	0
Poor teeth	119	58	45	24	33	1	8
Other physical defects	79	81	46	6	7	9	10
Communicable disease	2	2	1	0	0	0	1

DENTAL WORK.

A free school dental dispensary was established by the Board of Education in 1914 and has been in operation since then during the time schools are in session for three half-days each week with one dentist on duty and a nurse in charge. The following tabulation shows the scope of the work since the dispensary was opened:

Dental Dispensary:

Years:	1914	1915	1916	1917	1918	1919	1920
Number of children examined.	143	263	401	163	320	233	207
Number of cases completed...	82	90	129	127	212	268	177
Number of cases partially completed	61	173	272	0	0	0	0
Number of operations (includind treatment, fillings, extractions, and draing of abscesses	1023	887	1352	828	2018	1914	1451

Every case treated at the free dental dispensary is investigated by a nurse and certified before a ticket of admission is given.

One dentist working three half-days a week of course is very inadequate when we know that 60% or more of the school children need dental attention; nevertheless it represents a beginning in the curative phase of school dental service. We are aware of the fact that a much wiser approach to the oral hygiene question would be through the employment of several dental hygienists (training for which work is now given in several large institutions, special licenses being procurable from the State Department of Education) to do preventive work right through the grades; with prophylactic nurses thus available the need for curative dental clinics would be materially reduced. Recommendations for securing dental prophylactic nurses have been made in the Health Director's report for the past four years.

Nutritional Work.

More than ten years ago the old Open Air School located in the building adjoining the South End Dispensary was operated as a joint project of the Albany County Tuberculosis Committee of the State Charities Aid Association and the Albany City Board of Education. In 1914 with the completion of Public School 14 the old Open Air School was taken over entirely by the Board of Education. Provision had been made on the roof of School 14 for two Open Air classes and from forty to sixty children have been given care in this school each year since its opening; two teachers and a matron are employed and a school nurse visits the classes every day. Another class is maintained in School 6 where from twenty to twenty-five cases are handled each year; here a teacher, nurse and special cook is provided. Close cooperation is established with the Children's Observation Clinic at the South End Dispensary and all children placed under open air care by the Health Director receive intensive examination and study at the above named clinic.

Each school nurse is equipped with scales for weighing children in any school in the system, and provision is made for stimulating interest in improved nutrition through various types of pupil health organizations and through daily classroom instruction in health work. Hundreds of children have stopped drinking tea and coffee and have increased their intake of milk as a result of the health instruction program and the health club idea. A small number of children with active pulmonary tuberculosis, diagnosed at the Children's Observation Clinic, have been excluded from school.

Special Class Work.

A system of special classes for mentally deficient children was established in 1913, although a so-called "truant-school" had been in operation for over twenty years. The special classes now number eleven with approximately 200 children segregated. Psychopathic and delinquent types are separated and placed in a disciplinary class and in one school there is separate provision for girls and boys. These cases receive physical, neurological and psychiatric examination before admission or discharge and are reexamined at least once a year and oftener where indicated.

Definite plans have been made for group psychological tests *in certain schools of the system* next year. The children in the special classes receive a minimum of book-work and a maximum of hand-work and are graded in accordance with the results of psychological tests. A Director of Special Classes supervises the instructional program with these cases and an assistant director carries out routine mental tests. The Health Director conducts the intensive studies of these children and handles any cases of specialized defect as the aphasias, pre-dementias, epilepsies, etc.

Sight-Saving Work.

So-called sight-saving work has been developed most intensively in Ohio, particularly in the schools of Cleveland, through so-called sight-saving classes. In the spring of 1919 the Albany

Association for the Blind requested the Board of Education to open a class of this type in the schools of Albany. The Association paid the salary of the teacher for the first year and a group of over thirty prominent citizens paid the expenses of her special training in the schools of Cleveland. The Board of Education furnished a specially equipped room and the necessary supplies and located the children in need of this provision. September, 1920, the Board of Education took over the entire project. From eight to fourteen children are cared for in this class, most of them availing themselves of the sight-saving features of the class upon the advice of their physicians or their occulists.

Little Mothers League.

The past year, in conjunction with the Community Center Committee of the Womans Club, Mrs. E. M. Cameron, chairman, approximately 75 sixth, seventh and eighth grade girls were graduated as " little mothers." The prospect is that larger classes will receive the training next year. The work has been carried out by the school nurses after school hours.

Cooperation with Physical Training Department.

Reference to the chart of leading physical defects for the past seven years will show a definite decrease in the percent of children suffering from postural defects from the year that physical training was made a definite part of the school program. Certificates of excuse from this valuable feature of the school program are subject to the approval of the Health Director.

Emergency Cabinets.

Each school is equipped with an emergency cabinet which is kept stocked and is used daily by the nurse. As a sample of the usefulness of this outfit we might point to minor wounds, simple impetigo, nausea, burns, etc., seen by the nurse during a given period in 1914 to the extent of 1,280.

Over-Age Records.

For eight years annual curves have been plotted for the overage children throughout the school system. These records were of considerable value when the State Department definitely instituted such records as part of its plan a few years ago.

Examination of Newly Appointed Teachers.

The physical examination of all newly appointed teachers is made by the Health Director each year.

Technical Magazines.

Familiarity with the latest studies in health instruction and educational hygiene is essential to an up-to-date administration of the work, and a number of journals devoted to child-hygiene, educational psychology and public health in general are reviewed and summarized each month; the nurses pursue a definite reading course as a part of their continuous training, and they attend the monthly grade teachers' meetings where instruction is given by the Health Director on methods of health teaching.

Health Messenger.

The school health system edits a monthly bulletin known as "The Health Messenger," which aids in the health instruction program. Exchanges take place with a considerable number of health agencies and state and municipal health and education departments throughout the country. Through such measures we are able to profit most by methods and plans and suggestions gleaned from the programs of other states and cities. We also receive a number of visits each year from doctors and school hygienists who are inspecting one or another phase of school health work in certain cities.

Health Instruction Program.

A definite outline for daily health instruction is followed throughout the grades with doctor, nurses, principals, teachers, supervisors, and pupil health officers cooperating in a graded plan for the development of health habits. Various kinds of health clubs have been formed and have brought about striking results in the shape of improved health conditions, the cultivation of better health habits and the development of a higher sense of responsibility, personal and civic, amongst the pupils. Accident prevention has been taught daily in concrete fashion as a part of the health instruction program.

There was a time when school health work consisted only in physical examination of pupils by physicians and the handling of communicable disease in the schools. The work outgrew this mold some few years ago in the more progressive centers; these features of the work while important constituted only a part of an up-to-date program. Educational hygiene is now a well defined specialty with technical literature as extensive as any of the old-line specialties. Familiarity with the various researches that have been made in the chief lines of the subject during the last few years is imperative in the administration of the work if time and money are not to be wasted stressing the relatively needless things, and if the children are to profit by modern knowledge of how educational procedures may be helped by medical science. So much of the work quantitatively today is concerned with various preventive features that have come to be listed under physical education, the hygiene of teaching and the teaching of hygiene; and these subjects, if they are to function as parts of an up-to-date school health program, involve a knowledge of their special psychologies and a modern pedagogy. We invite you to let us show you in person what we are trying to do in the school health field in Albany; and I assure you we are eager to have your friendly advice and suggestion. For obvious reasons, financial, administrative, etc., it is not always possible to see even a good idea immediately put into effect as part of a piece of public health work; but we are grateful for the constructive help that has been accorded us by members of the local profession during these years that we have been striving to lay the foundation of a modern system of educational hygiene in the schools of Albany.

CHRONIC ULCERATIVE COLITIS.

By WILLIAM P. HOWARD, M. D.

As defined by A. H. Logan of Rochester, Minnesota, in his review of 117 cases, chronic ulcerative colitis, is a disease of the large bowel characterized by chronic inflammation of unknown etiology showing all grades of inflammatory change from a reddened congested, easily bleeding mucous membrane to superficial and deep ulcerations with a duration of from several months to many years of either constant dysentery or a tendency to remissions.

In the year 1721 Menzel of Berlin described a lesion of the intestinal tract with wart-like excrescences on the colon and accompanied his article with a crude etching. The specimen was removed from a soldier who died of chronic dysentery.

Wagner described a similar case in 1832, and in 1839 Rokitansky, in describing his case, contributed the observation that these excresences arose from islands of mucous membrane that remained after the ulcerative process.

The next contribution of note was made by Luschka in 1861. He described a specimen removed from a woman thirty years old who died from bloody diarrhoea. On microscopic examination the polypi consisted of glands resembling those of Lieberkuhn except that they were longer and many were more or less branched and some dilated to cyst-like spaces.

To these Virchow added the case of a boy of fifteen and classified the foregoing cases together with his own as Colitis Polyposa Cystica.

In 1881 Woodward, author of the Medical and Surgical History of the War of the Rebellion, gave the following description of a specimen sent to the museum of the surgeon general's office. "The ileum four inches above the valve and the colon for its entire length appeared inflamed. In the lower transverse colon there were numerous follicular ulcers becoming more numerous toward the rectum. The whole of the lower descending colon was occupied by a single ulcer projecting from the base of which were thirteen polypoid excrescences, some fourteen millimeters in length and four millimeters in diameter. Some were attached by single, others by double, pedicles. Microscopic examination showed a central mass of connective tissue and a peripheral border of mucous membrane. The mucosa extended over the polyp as far as its base but was absent from the surface between polypi. The intervening surface was composed of granulation tissue containing a large number of lymphoid cells.

Since the beginning of the twentieth century a large number of cases have been reported and chronic ulcerative colitis is now recognized as a clinical entity.

Etiology.

Some observers believe that this disease is originally a bacillary dysentery of the Shiga or Flexner type; others that it originated by amobae which later disappear from the stool. In no case, however, has any one organism reproduced uniformly the disease in animals. It is probably produced by a number of organisms. A single case sometimes follows an epidemic of ptomaine poisoning; all the other cases clearing up. Some cases arise from no known cause, but none have been transmitted from one to another. The disease usually begins between the ages of ten and thirty.

Pathology.

The inflammation apparently begins in the rectum and extends upward. The protoscope frequently shows lesions low down and none above. The X-ray findings likewise frequently show a limited involvement; the descending colon only or the descending with portion of the transverse colon or if the whole colon is involved, the changes in the descending colon and sigmoid are more marked. At post mortem examinations the oldest lesions are found low down and the more recent ones in the upper colon. Sometimes ulcers extend into the lower ileum. The mucosa first becomes red and congested. At this stage it bleeds easily, and there is increased watery secretion. Then it breaks down into superficial ulcers proceeding on to deeper and wider ulcers and sometimes perforation. Small, round-celled infiltration of the submucosa and muscular layers is very marked. One of the chief characteristics is the thickening of the wall and the smooth-ing out of all the folds of mucosa leaving an even, glazed surface. The thickening is caused primarily by hyperplasia in the mucosa and later by fibrosis in the deeper layers. After some time the contraction of this fibrous tissue causes narrowing of the lumen and if the process is localized, it may give rise to partial obstruction. In operative cases a small amount of free fluid is frequently found in the peritoneal cavity. As to polypi, it is possible that swollen and edematous islands of mucous membrane are frequently called polypi. On the other hand, secondary citricial changes may constrict the submucosa beneath these islands and glands may become occluded giving rise to retention cysts, the pedicles of both being elongated by peristaltic action and the passage of intestinal contents over them. In cases of long standing, fatty degeneration of the liver is a frequent finding.

Symptoms.

The disease always begins with dysentery, either gradual in onset, becoming more severe or beginning acutely. The stools are at first watery and later show fresh blood and pus. Some cases, however, never show macroscopic blood. Bowel movements vary in number from 3 to 15 daily, which may keep up for several years or the ulcers may become latent, and during this time the bowels may become regular or constipated. As the rectum is most severely involved, tenesmus is often present. It occurred in one-third of the cases reported by Logan. Pain is not a severe symptom. It is more often absent, but when present is never acute unless due to perforation. Burning or an uncomfortable feeling along the line of the colon is a frequent complaint. Abdominal gas and the expelling of excessive amounts caused complaint in thirty-four per cent of the Mayo series. Food digestion and absorption being little interfered with, weight loss is not an early symptom. Fever likewise is usually absent until late in the disease. Many patients are able to work for years without much loss of strength, but when they reach their limit these patients usually break very quickly.

Perforation is not uncommon and it is not always fatal without operation. The perforations are gradual and are usually well walled off. When they do occur there is a slight localized peritonitis with fever and some pain. The patient is in good spirits and usually inclined to look on the bright side of things until very late in the disease.

Loss of Weight.

14 patients less than	10 lbs.
16 patients from	10-20 lbs.
20 patients from	20-30 lbs.
19 patients more than	50 lbs.

Haemoglobin.

1 patient below	20
3	21-30
6	31-40
12	41-50
9	51-60
18	61-70
27	71-80
15	81-90

In the Mayo series seventy cases had symptoms from less than one year up to four years. The remaining forty-seven from five years up to twenty-five.

Diagnosis.

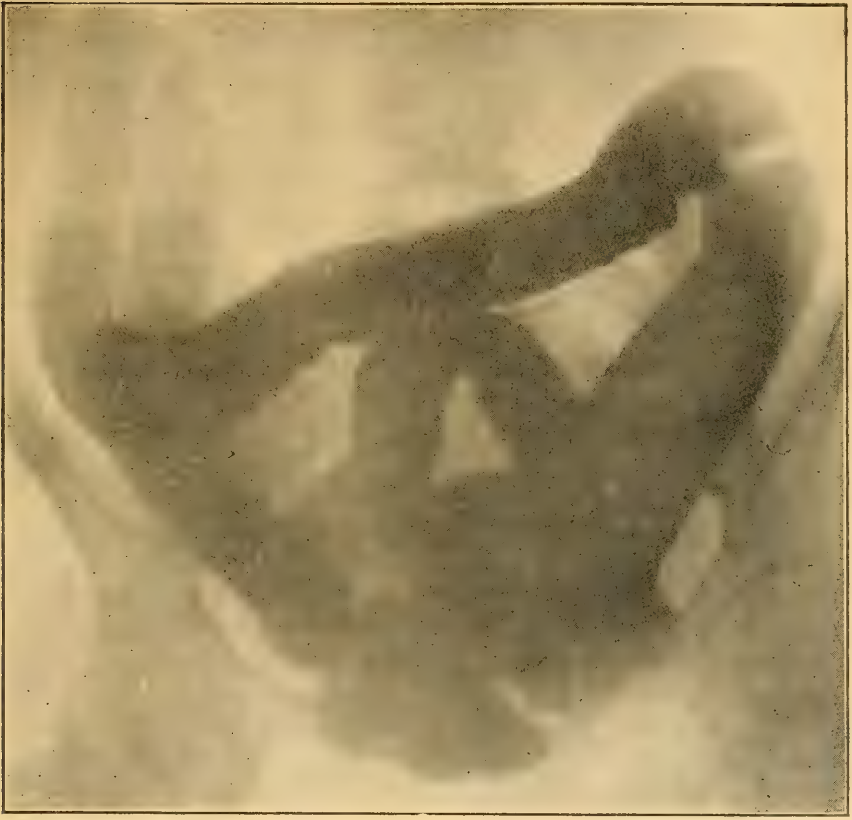
Based upon a persistent diarrhoea or alternating constipation and diarrhoea, blood, pus and mucus being found in the large majority of cases. The absence of amobae, specific bacteria and parasites from stool. Exclusion of tuberculosis, syphilis and malignant disease. Visualizing ulcers in sigmoid and rectum with the protoscope and characteristic X-ray changes. (See Fig. 1.)

Differential diagnosis.

Chronic ulcerative colitis must be differentiated principally from the specific inflammations of the colon; bacillary and amoebic dysentery, tuberculosis, syphilis, etc., and carcinoma. This point is well illustrated by one of the cases reported by J. H. Hewitt and W. T. Howard in which the patient's age (40), secondary anemia (4,000,000 red cells and 50% hemoglobin), emaciation and rectal mass gave the clinical picture of carcinoma of the rectum, but necropsy disclosed a chronic ulcerative colitis with polypoid changes in the rectum and sigmoid.

To Illustrate Dr. Howard's Article on "Chronic Ulcerative Colitis"

Albany Medical Annals, April, 1921



Characteristic X-ray Changes

1. Very rapid filling (observed fluoroscopically)
2. Apparent diminished total length of large bowel
3. Tubular or ribbon like character
4. Small calibre
5. Absence of haustrations

Though not characteristic of ulcerative colitis, in the majority of cases there is a marked incompetency of the ileocecal valve.

Prognosis.

In Mayo series 66 patients treated medically, 7.5% mort., 5 patients operated prim. mort., 11.8; total, 27.5.

Treatment.

Rest in bed and a proper diet are of prime importance. A strict milk diet is beneficial, but in those cases in which it is not well tolerated, it may be modified and combined with chicken broth, bouillon, beef juice, oyster and clam soups. Egg albumin, soft boiled egg, corn starch, rice, etc., may also be added. The caloric value of the diet should be estimated and made to answer the nutritional requirements of the patient, provided the diseased intestine tolerates the necessary amount.

Olive oil, three to six ounces daily by mouth with Bi sixty to ninety gr. and a similar dose administered in the form of an enema with the patient in the knee chest position each night. This mixture is soothing and frequently gives a great deal of relief to the patient.

The results of silver nitrate treatment are doubtful. Mummery reported a case of argyrosis following this treatment.

In the Mayo series the greatest benefit was derived from the administration of continuous hot water per rectum for thirty minutes twice daily. Temperature of water at entrance into rectum 120 F. A two-way plug was used, great care being exercised to avoid distention.

Emetine hydrochloride and coal oil enemas were used as routine, but improvement was noted in only one case. One case recovered in which ipecac irrigations were used.

No definite results were obtained from the use of outagenous vaccine.

Basseler recommends transduodenal lavage, using the Jutte tube and Jutte solution (9 gm. each of Na_2 SO_4 & NaCl with 4cc. of a 10% alcoholic sol. of phenolphthalein and a teaspoonful of soda bicarb. to the liter of water). Diet employed, total protein and water.

As to surgery Lockhart Mummery, senior surgeon to St. Mark's Hospital, London, recommends appendicostomy.

Lynch and Draper in their paper recommend ileostomy as the operation.

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J. H. Hewitt and W. T. Howard: Chronic Colitia, *Archives for Internal Medicine*, 1917.
A. H. Logan, Rochester, Minn: Chronic Ulcerative Colitis, *Northwest Medicine*, 1919.
McMahon and Carmen: Chronic Ulcerative Colitis, *Mayo Clinics*, 1917.
Anthony Basseler: *Southern Medical Journal*, 1919.
Lockhart Mummery: *British Medical Journal*, 1920.

Cases Presented

Mr. I. L. Age 34, Jewish.

P. H.—History of constipation, anorexia and nausea for seventeen years. Since June, 1920, has had frequent attacks of diarrhoea with blood, pus and mucus in the stool.

A diagnosis of advanced pulmonary tuberculosis was made on this patient in 1917.

At present no cough and no signs of activity. X-Ray shows old changes in lung.

Proctoscopic and X-ray examinations show the changes of chronic ulcerative colitis.

Stool shows a marked reaction for occult blood. Neg. for amobae.

Guinea pigs inoculated. Negative for tuberculosis.

Hemoglobin, 89%; red cells, 4,800,000; white cells, 13,000. Three months after ileostomy, this patient had almost entirely recovered.

Mr. C. M. Age 32.

Patient enjoyed good health up to April, 1920, when he suddenly experienced pain in the left lumbar region which was persistent and was followed in three or four days by a steadily increasing diarrhoea at first watery and later bloody thirty to thirty-five stools per day. Diagnosed as amobic dysentery and treated by emetine.

December, 1920, patient presents picture of a marked secondary anemia: red cells, 2,688,000; hemoglobin twenty-six per cent.

Guinea pig inoculation negative for tuberculosis.

Stools negative for amœbæ.

Mr. S. Age, 45, machine operator in a glove factory.

General health good up till October 1, 1920. Suffered pain in the lumbar region and along the lateral aspects of the thighs. This pain was followed by stiffness of back and right leg and progressed to the stage of poker back. On questioning the patient says he suffered from a diarrhoea in June, 1920. At that time the stools consisted mainly of slimy material. This condition has alternately disappeared and reappeared since.

Blood: Red cells, 4,768,000; hemoglobin, seventy-four per cent.; white cells, 14,600.

Stool shows pus and blood.

Wassermann negative.

Clinical and Pathological Notes

X-Ray Conferences.

The seventh, eighth and ninth conferences of the Roentgen Ray Department of the Albany Hospital were held respectively in the months of January, February and March. Practically all the cases presented at these three conferences were from the laboratories of out of town men. The cases presented were as follows:

DR. McMINN
of Schenectady

1. Pericarditis with effusion	The effusion was aspirated and a subsequent picture suggests the presence of air in the pericardial sac.
2. Subluxation of a cervical vertebrae	This case had been referred for x-ray as a probable fracture of the skull but was proved to be a subluxation of a cervical vertebrae.
3. Gall stones	Remarkably clear picture of the stones, fourteen stones can be counted on the x-ray plate and that number was found at operation.
4. Pneumothorax	Child with an open safety pin in the esophagus that had caused an ulceration through the wall of the esophagus. The pin was removed at operation but the patient died three weeks later.

DR. KEOUGH
of Cohoes

1. Carcinoma of the sigmoid	Dr. Keough presented an interesting and instructive case in which a patient had been referred to him for examination of the stomach only. The findings were negative. Later the patient was found to have a carcinoma of the sigmoid which probably could have been diagnosed at the first examination. The case illustrates the importance of a complete gastro-intestinal examination, in all cases.
2. Ulcer of the stomach.	

Dr. HULL

of Troy

1. Stones in the bladder.................. The stone had caused an ulceration into the rectum and fecal material and gas had been passed from the bladder.
2. Perforated gastric ulcer............... Diagnosis of ulcer had been made by Dr. Hull fourteen years before.
3. Ulcer of the stomach.
4. Roentgenogram of the heart of a child in which the shadow of a portion of the bronchial tree is superimposed on the shadow of the heart in such that the appearance of a heart shadow within a pericardial sac shadow is given.

Dr. WOODALL

of Schenectady

1. Stone in the kidney.................... The shadow of the stone was apparently in the course of the ureter, but at operation the stone was found to be in the lower pole of the kidney.
2. Aneurysm in the thigh.
3. Mediastinal new growth.

Dr. KING

of Saratoga

1. Perforated gastric ulcer.
2. Case suggesting possibility of communication between esophagus and bronchus.
3. Hour glass stomach.
4. Ulcer of stomach.
5. Carcinoma of splenic flexure.
6. Ulcer of stomach.
7. Chronic appendicitis with adhesions.
8. Ulcer of stomach.

Dr. WITTER

of General Electric Company

Dr. Witter presented roentgenograms made by various makes of Potter-Bucky Diaphragm.

Dr. HOWARD
of Albany

1. Cases of chronic ulcerative colitis. (See special article.)

Dr. BERRY
of Albany

1. Exostosis of the tibia. (See special article.)

An Unusual Exostosis of the Tibia. By John M. Berry, M. D.

From the Roentgen Ray Department, Albany Hospital

The exostosis here described was found on the outer surface of the lower end of the right tibia. The patient was a young man eighteen years old, and complained of pain on the outer side of his right leg just above the ankle. The patient stated that he had fallen and injured his leg about a month ago, and had had pain ever since.

On examination there was found to be present a very hard fusiform swelling on the outer side of the right leg, just above the ankle. The swelling was hard like bone, was immovable and seemed to be attached to or a part of the tibia. A diagnosis of a bony tumor of the fibula was made and an x-ray examination suggested.

The result of the x-ray examination was somewhat of a surprise. The " tumor mass " that could be seen and felt on the outer side of the leg was not the real tumor at all but was a distorted fibula which was bowed outward by the pressure of an exostosis growing from the outer surface of the tibia (see fig. 1).

The exostosis was removed by operation (see figure 2) and the patient made an uneventful recovery but the outward bowing of the fibula was, of course, still present.

To Illustrate Dr. Berry's Article on "An Unusual Exostosis of the Tibia"

Albany Medical Annals, April, 1921

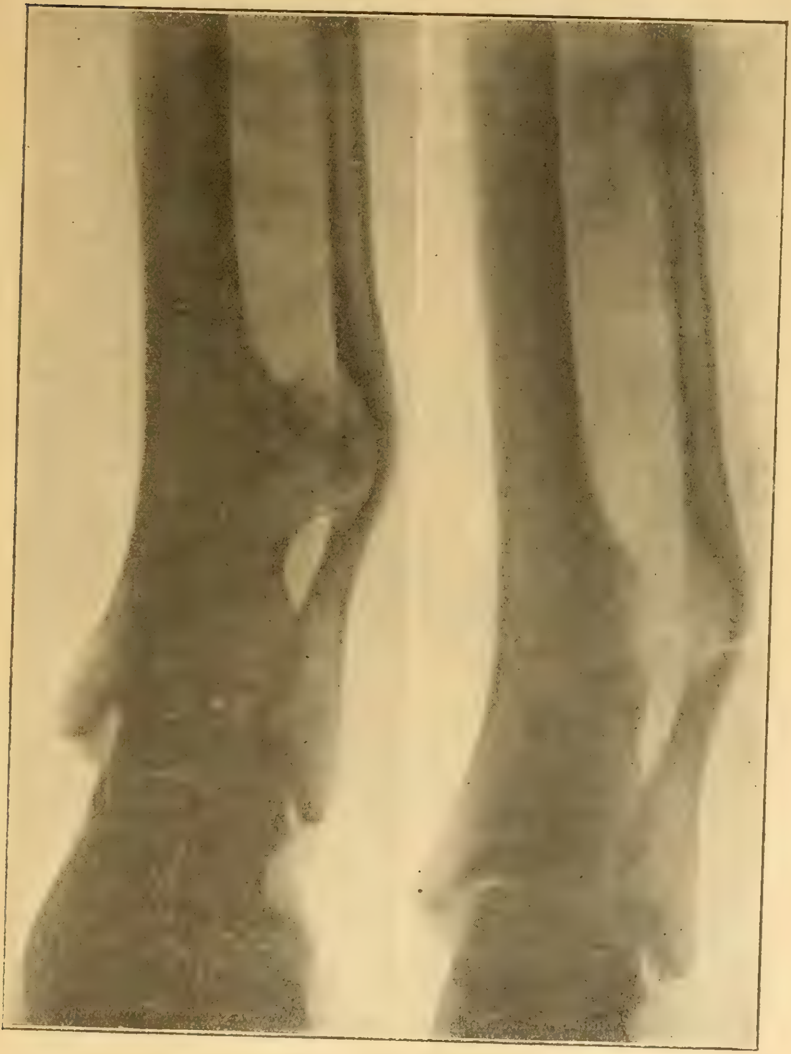


Fig. 1.

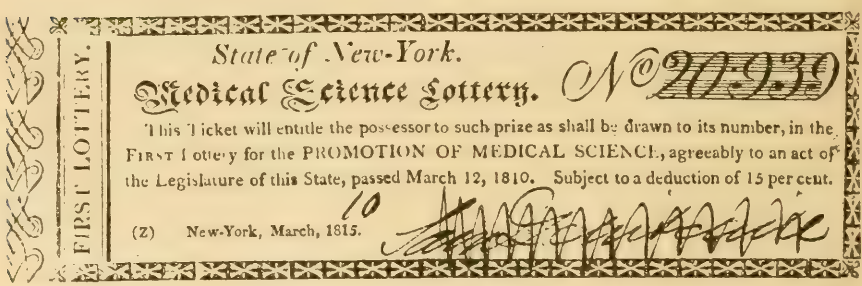
Fig. 2.

Correspondence

A NOTE ON DAVID HOSACK.

On March 12, 1810, an act was passed by the New York Legislature to establish a lottery to raise money to purchase the Botanic Gardens established by Dr. Hosack at Elgin, three miles outside New York City. The request for this lottery had come from "the New York Hospital" and "the Medical Society of the State of New York." The Act suggests that the Botanic Gardens, "may become a great public benefit by being able to promote medical science in this state." A committee was formed by the act, "to treat with the State and attend Hosack for the purchase," etc.; and a commission was formed who had "the power to raise the consideration money by a lottery." The Act also stated that "physicians and students of medicine throughout the state shall at all times have access to the State Botanic Gardens free from all expense." Five members of the lottery were named. The Act was published in the Public Laws of the State of New York, 33rd Session of the legislature, Albany, 1810, chapter 50, page 17. The lottery ticket reproduced is a photograph of the original ticket in the collection of Mr. Frank L. Reuss of Albany, to whom I am indebted for the loan of this ticket for photographic purposes.

HENRY VIETS.



FIRST LOTTERY.

State of New-York.

Medical Science Lottery. No 21939

This Ticket will entitle the possessor to such prize as shall be drawn to its number, in the First Lottery for the PROMOTION OF MEDICAL SCIENCE, agreeably to an act of the Legislature of this State, passed March 12, 1810. Subject to a deduction of 15 per cent.

(Z) New-York, March, 10 1815.

Public Health

Edited by Arthur Sautter, M. D.

Department of Public Safety, Bureau of Health, Albany, N. Y.

Compiled by William F. Fullgraff, Registrar.

Bureau of Vital Statistics.

Deaths for the Month of February 1921

Tuberculosis	10	Grippe	0
Typhoid Fever	1	Brights Disease	11
Diphtheria	1	Apoplexy	8
Scarlet Fever	0	Cancer	17
Whooping Cough	0	Accidents and Violence	3
Measles	0	Deaths under one year	11
Diarrheal Diseases	2	Deaths over 70 years	54
Pneumonia	8	Death rate	18.24
Broncho Pneumonia	5	Death rate less non-resident	15.98
Influenza	0		

Deaths in Institutions

	Non. Res.	Res		Non-Res.	Res.
St. Peter's Hospital	3	10	Dominican Convent	0	1
Albany Hospital	5	11	National Training School	0	1
Homeopathic Hospital	2	8	Home for the Aged	0	1
Home for Incurables	2	6	Public Places	0	1
St. Margaret's House	2	1			
Child's Hospital	0	2		15	46
Albany County Hospital	1	1	Births		190
Maternity Hospital	0	3	Stillbirths		6

Division of Communicable Diseases

Typhoid Fever	2	Tuberculosis	15
Scarlet Fever	23	Mumps	0
Diphtheria and Croup	13	Pneumonia	46
Chickenpox	66	Influenza	18
Smallpox	0	Encephalitis Lethargica	1
Measles	120	Puerperal Septicaemia	1
German Measles	0		
Whooping-cough	37	Total	342

Number of days quarantine for scarlet fever:
Longest........ 30 Shortest........30 Average........ 30
Number of days quarantine for diphtheria:
Longest........ 24 Shortest........ 11 Average....... 18
Fumigations:
Rooms......... 109 Buildings .. 98
Milk bottles disinfected........................ 1227

Communicable Diseases in Relation to Schools

	Reported		
	D.	S.F.	M.
Public School No. 1	..	2	2
Public School No. 2	..	..	2
Public School No. 3	1	1	..
Public School No. 4	..	..	3
Public School No. 5	..	1	..
Public School No. 6	..	..	3
Public School No. 7	1	..	..
Public School No. 8	1	..	4
Public School No. 10	1	..	..
Public School No. 12	..	1	..
Public School No. 14	..	..	6
Public School No. 15	..	1	3
Public School No. 16	..	2	17
Public School No. 17	..	2	13
Public School No. 19	..	..	8
Public School No. 20	2	6	1
Albany Boy's Academy	..	..	1
Academy Holy Names	..	..	1
St. John's Academy	..	3	..
Lady Help of Christians School	..	1	..
St. Ann's School	1	..	7

MISCELLANEOUS

Cards posted for communicable disease	150	Vaccination dressings	151
Cards removed	94	Children examined for employment certificates	5
Notices served on schools	260	Number of employment certificates issued	5
Notices served on stores and factories	20	Taking specimens of blood for Wassermanns	1
Postal card returns sent to doctors	140	Taking smears for Gonococci	0
Postal card returns received from doctors	94	Cultures	27
Inspections and reinspections	185	Postal cards sent to milk dealers	85
Vaccinations	25		

Tuberculosis

Living Cases on record February 1, 1921		621
Cases reported:		
By card	12	
Dead Cases by Certificate	3	15
		636
Dead Cases previously reported	7	
Dead Cases not previously reported	3	

Removed	23	
Died out of town	0	
Recovered	0	
Unaccounted for	0	33
Living cases on record March 1, 1921		603
Total Tuberculosis Death Certificates		10
Non-resident deaths:		
Albany Hospital Camp	0	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	1	
City at large	0	1
Resident deaths		9
Visits to cases of tuberculosis		112
Miscellaneous visits		13
Visits to physicians		12

LABORATORY REPORT

Diphtheria

Initial Positive	26	Unsatisfactory	9
Initial Negative	170		
Release Positive	45	Total	405
Release Negative	155		

Sputum for Tuberculosis

Positive	55	Unsatisfactory	0
Negative	90		
		Total	145

Widals

Positive	1	Unsatisfactory	2
Negative	14		
		Total	17

Meningococcus

Positive	0	Negative	0
		Total	0

Wassermann tests (positive 43)	299	Gonorrhoea Examinations (positive 28)	77
Milk Analyses	108	Miscellaneous examinations	1
Water Analyses	0		
Pathological Examinations	0	Total Examinations	1,052

HEALTH PHYSICIANS' REPORT

Cases assigned	45	Calls made	100

DIVISION OF SANITATION

Complaints		47	Garbage collected from 1st. District . . . bbls.	240
Inspections		22		
Plumbing	4		Garbage collected from 2nd. District . . . bbls.	180
Sanitary	18			
Reinspections		30	Garbage collected from 3rd. District . . . bbls.	300
Plumbing	9			
Sanitary	21			

HEARINGS

Hearings	1	Cases heard	1

Class of Cases

Plumbing	1

Disposition of Cases

Reinspection	1	Abated	0

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION

Inspections		74	Smoke	0	
Old Houses	43		Blue or red	0	
New Houses	31		Peppermint	1	
Permits issued	18		Water test	9	
Plumbing	18		Houses examined		18
Building	0		Re-examined		60
Plans submitted		0	Valid	5	
Old buildings	0		Without cause	13	
New buildings	0		Violations		0
Houses tested		10			

REPORT OF REMOVAL OF DEAD ANIMALS

Horses removed	19	Cases of eggs removed	20
Dogs removed	7		
Cats removed	8		
Total	34		

DIVISION OF MARKETS AND MILK

Public market inspections	22	Milk cans inspected	127
Market inspections	125	Milk cans condemned	0
Fish market inspections	13	Lactometer readings	62
Fish peddler inspections	0	Temperature readings	62
Slaughter house inspections	2	Fat tests	24
Rendering establishment inspections	0	Sediment tests	32
		Chemical tests	0
Pork packing house inspections	5	Cows examined	0
		Cows quarantined	0
Hide house inspections	0	Cows removed	0
Milk depots inspected	35	Complaints investigated	2
Stores inspected	38	Milk houses inspected	40
Dairies inspected	40		

Medical News

The Albany Hospital has purchased radium for the treatment of patients suffering from various pathological conditions which are favorably influenced by this agent. The extraordinary, physical properties of radium, and other radio-active substances, have altered the conception of fundamental chemical laws; and it is, therefore, not surprising that the therapeutic claims which have been made have been grossly exaggerated. The conditions which may be benefited by radium fall into two groups:

Group I. Cases in which radium therapy may be of curative value. This includes localized, so-called basal-cell carcinoma and early rodent ulcers, especially of the face and eyelids, rarely certain sarcomata, keratoses, papillomata, verruca, certain nevi, and numerous skin diseases.

Group II. Cases in which palliative results, with particular reference to improvement in the local and general condition, may be observed. This includes inoperable and recurrent carcinomata and sarcomata, if the patient is not already anemic or cachetic, leukemia, Hodgkin's disease, keloids, certain angiomata and many other localized skin diseases.

Through research, it is hoped to extend further the use of radium. The work with radium has been delegated by the Board of Governors to the Medical Service whose aim is to co-operate with the other departments of the hospital and physicians generally, and thus place the advantages of radium therapy at the disposal of all physicians through the Radium Department for the use of their patients. Arrangements for radium and the booking of rooms should be made through the Superintendent's office, Albany Hospital, Albany, N. Y.

American Medical Editors' Association.—The 52nd annual meeting of the American Medical Editors' Association will be held at the Hotel Lenox, Boston, Mass., on Monday and Tuesday, June 6th and 7th, under the presidency of Dr. H. S. Baketel, editor of the *Medical Times*.

A novel feature of our literary program will be introduced this year in the shape of a symposia, which will be discussed by various members. The subjects will be, "Group Practice and the Diagnostic Clinic;" "What Should be the Attitude of the Profession Toward Health Centers?;" "The Correlation Between Editorial, Advertising and Subscription Work." Every doctor, even remotely interested in medical journalism, will find it to his advantage to attend, and is most cordially invited.

American Proctologic Society.—The twenty-second annual meeting will be held at Boston, Mass., on June 3, 4, and 6, 1921. The following program has been announced: Presidential address, Alois B. Graham, Indianapolis, Ind.; "Post-Graduate Teaching of Proctology," Collier F. Martin, Philadelphia, Pa.; "Biopsy of Intestinal Tumors with a New Specimen Forceps," Frank C. Yeomans, New York, N. Y.; "Treatment of Pruritus Ani by Ionic Medication," William A. Rolfe, Boston, Mass.; "My Present Views of the Treatment of Internal Hemorrhoids by Quinine and Urea," Emmet H. Terrell, Richmond, Va.; "The Use of Quinine Urea Hydrochloride in the Treatment of Partial Rectal Prolapse," Walter A. Fansler, Minneapolis, Minn.; "Prolapse of the Rectum," Jerome M. Lynch, New York, N. Y.; "Separation of the Recti Muscles of the Abdomen a Causative Factor in the Production of Ptosis of the Colon and Sigmoid and Fecal Stasis," William H. Axtell, Bellingham, Wash.; "The Rectal Type of Constipation," William M. Beach, Pittsburg, Pa.; "Hypertrophy of the Anal Papillae," Donley C. Hawley, Burlington, Vt.; "The Choice of a General Anaesthetic in Proctologic Surgery," W. Oakley Hermance, Philadelphia, Pa.; "Principles of Gastro-Recto-Enteric Surgery," James A. MacMillan, Detroit, Mich.; "Post-Operative Comfort in Rectal Cases," Descum C. McKenney, Buffalo, N. Y.; "The Significance of Rectal Hemorrhage," John D. Stewart, New York, N. Y.; "Bleeding From the Rectum, Its Significance and Treatment," Joseph F. Saphir, New York, N. Y.; "Recto-Colonic Hydrotherapy," Alfred J. Zobel, San Francisco, Cal.: "Isolated or Discrete Tubercle of the Ischio-Rectal Fossa—Report of Case," Curtis C. Mechling, Pittsburg, Pa.; "A Classification of Proctologic Fistulae, Treatment of Each Variety," J. Rawson Pennington, Chicago, Ill.; "The Relation of pulmonary and Ano-Rectal Tuberculosis to Fistula in Ano," Samuel G. Gant, New York, N. Y.; "Peri-Rectal Infections and My Original Method of Dealing with Them," John L. Jelks, Memphis, Tenn.; "Preservation of the Anal Muscles in Operations for Rectal Fistulae," (Lantern Slides), Granville S. Hanes, Louisville, Ky.

THE FOOT CLINICS OF NEW YORK, 213-217 WEST 125TH STREET.—The Foot Clinics of N. Y. were established for the purpose of affording treatment to the poor who are foot-afflicted. The clinics are open for this purpose nightly (except Saturdays, Sundays and holidays). During the year ending August 1st, 1920, 13,000 treatments were given. Among the various conditions treated were the following: Anidrosis, Bromidrosis, Bullae, Bursitis, Chimatlon mild, Chimatlon severe, Eczema, Hallux flexus (Hammer toe), Hallux rigidus, Hallux valgus, Heloma durum, Heloma molle, Hyperidrosis, Infections, Lichen planus, Metatarsalgia, Pes cavus, Pes planus (Flat Foot), Plantalgia, Psoriasis, Schaffer's foot, Sinus, Spastic Weak Foot, Talipes (varieties of), Verucca (varieties of), Weak foot.

The clinical staff is composed of physicians and podiatrists who serve without pay. In addition to the attending staff, there are consultants as follows: surgeons, urologists, dermatalogists, chemists, laryngologists and dentists.

The Clinics are divided as follows: General Clinic, Special Clinic, Orthopaedic Dept., including the following subdivisions: X-Ray, massage, electro-therapy, baking, plaster of Paris, dental.

The Clinics are the first of their kind in the world. The need for them is emphasized by the continuously increasing demands for the services of the staff. The facilities, notwithstanding the fact that on three different occasions during the past eight years augmented quarters were necessary, are insufficient to supply the wants of the public. The Clinics receive no aid from the State, from the City, from the Hospital Association or from the Federation and are therefore solely reliant for monied support on the philanthropy of our citizens.

The support of the philanthropically inclined is asked for The Foot Clinics of N. Y. Every cent subscribed is employed in furthering the objects of this organization, namely, the relief of the poor who are foot sufferers. All professional service is given gratuitously and graciously. The entire clinical staff is impressed with the worth of the work which is here being accomplished in the relief of human suffering and in the rehabilitation of those rendered inefficient because of their foot defects.

THE MERRILL JUBILEE.—At the Fort Orange club on Tuesday evening, March first, Dr. A. J. Bedell gave a dinner for Dr. Cyrus S. Merrill, one of the best known oculists in this section, in honor of his fifty years of service, and for many years professor of Ophthalmology in the Albany Medical College. Dr. James F. Rooney was toastmaster. The speakers included: Dr. A. J. Bedell, Dr. C. S. Merrill, President Charles Alexander Richmond of Union college, former Supreme Court Justice Alden Chester, Dr. John M. Clarke and Dr. LaSalle Archambault.

Among the guests were: Dr. Albert Vander Veer, Dr. G. W. DeSchweinitz of Philadelphia, oculist to President Wilson; Dr. Carl Riordan of Montreal, Dr. Lucien Howe of Buffalo, Dr. Edward Jackson of Denver, George F. Peabody, Dr. James F. Barker, Dr. James P. Boyd, Dr. Ezra Bartlett, Dr. Robert Babcock, Dr. John M. Berry, Dr. Charles M. Culver, Dr. James W. Canaday, Dr. Erastus Corning, Dr. Joseph D. Craig, Dr. Frederick C. Curtis, Dr. Frederick C. Conway, Dr. Charles E. Davis, Dr. J. Lewi Donhauser, Dr. J. M. Griffin, Dr. Hermon C. Gordinier, Dr. John H. Gutmann, Dr. George E. Gorham, Dr. Eugene E. Hinman, Dr. Henry Hun, Dr. David W. Houston, Dr. Christian Hacker, Dr. Louis Hacker, Dr. Clinton B. Hawn, Dr. Percival W. Harrig, Dr. Thomas W. Jenkins, Dr. Harry V. Judge, Dr. Ellis Kellert, Dr. Howard E. Lomax, Dr. J. B. Ledlie, Dr. J. Montgomery Mosher, Dr. Andrew Macfarlane, Dr. James Mitchell, Dr. James P. Marsh, Dr. Samuel R. Morrow, Dr. Charles H. Moore, Judge Chester B. McLaughlin, Dr. Leo H. Neuman, Dr. Joseph O'Brien, Dr. Thomas Ordway, Dr. Dennis O'Leary, William S. Ostrander, Dr. Harry Rulison, General Amasa J. Parker, Dr. H. L. K. Shaw, Dr. John A. Sampson, Dr. Clement Theisen, Dr. Willis G. Tucker, Dr. Alvah R. Traver, Dr. James N. Vander Veer, Dr. Edgar Vander Veer, Dr. Augustus Wadsworth and Dr. Thomas E. Warren.

THE AMERICAN JOURNAL OF SURGERY.—The May number will be devoted exclusively to "Fractures" and this issue will present the following original papers by recognized authorities upon the subject of fractures and their treatment: "Fractures of Tibia-end-results and Ambulant Treatment," Dr. John J. Moorhead, New York City; "Treatment of Fractures of the Humerus," Dr. Joseph Blake, New York; "Treatment of Fractures at and about the Ankle," Dr. Frederic J. Cotton, Boston, Mass.; "The Cerebral Symptoms and Operative Indications in Skull Fractures," Dr. William Sharpe, New York City; "Latent Symptoms from Unrecognized Fractures of the Vertebrae," Dr. Norman Sharpe, New York City; "Fractures of Fingers and Toes," Dr. Harry E. Mock, Chicago, Ill.; "Early and Complete Immobilization as a Factor in the Preservation of Joint Function in the Treatment of Fractures," Dr. H. Winnett Orr, Lincoln, Nebr.; "Intertrochanteric Fractures of the Femur," Dr. Kellogg Speed, Chicago, Ill.; "Bedside Radiography in Fractures," Dr. I. Seth Hirsch, New York; "Fractures at the Head of the Radius," Dr. James Morley Hitzrot, New York; "Traction—Suspension—Apparatus," Dr. Henry H. M. Lyle, New York; "Pott's Fracture of the Leg," Dr. W. L. Estes, So. Bethlehem, Pa.

IN HONOR OF MME. CURIE.—The June issue of the *Medical Review of Reviews* will be a special radium number dedicated to Mme. Curie. The issue will consist exclusively of articles on radium and its uses, written by the most prominent radiologists in the United States and Canada.

Copies will be sent complimentary to every physician interested in the uses of radium and any readers of this item who desire that issue may have it by asking for it from the *Medical Review of Reviews*, 51 East 59th Street, New York.

ASSOCIATION OF THE ALUMNI ALBANY MEDICAL COLLEGE.—The next meeting which will be held on Monday, June 13, 1921, at 2:30 p. m. This year, the Executive Committee has arranged to hold the Meeting and Dinner on the same day as the Commencement of the University in Schenectady.

The following schedule of events has been arranged: 10:30 a. m., Commencement—Union University, Schenectady; 2:30 p. m., Meeting of Alumni Association—Albany Medical College; 4:00 p. m., Class Reunions—Albany Medical College; 7:00 p. m., Dinner—Albany Hospital.

Every member of the Alumni Association should fix the date—June 13, 1921—in his mind, and arrange to be present. This is the beginning of a new era, now that the Endowment Fund is an assured fact, it means in the near future, the erection of a new College Building upon the site selected near the Albany Hospital.

Personal.—Dr. J. D. Olin (A. M. C. '04), is in practice at 227 Stone street, Watertown, N. Y., and announces that he is prepared and equipped to make cystoscopic and urethrascopic examinations in the male and female, including the more accurate determination of conditions of the posterior urethra, prostate and adnexa, vesical neck, bladder, and ureters, renal catheterization, segregation and comparative functional tests; also pyelography (in collaboration with the radiographers); and to do renal pelvic lavage, electric fulguration of bladder and urethral tumors, dilatation of ureters, removal of foreign bodies, and other minor operative procedures carried out through the cystoscope and cysto-urethrascope.

Current Medical Literature

REVIEWS AND NOTICES OF BOOKS

Surgery of the Temporal Bone. By Ballance. Published by Macmillan, London, 1919.

As the field of neurological surgery has become a distinct branch of surgery in the last few years, certain valuable contributions have come in the form of books from the special workers confining their efforts to this ground. In this country two notable works have been published, both on narrow limits of an ever broadening domain. Harvey Cushing in 1917 produced a monograph on tumors of the cerebellopontile angle, a superb contribution on a single aspect of the pathology of the central nervous system (*Tumors of the Nervus Acusticus*, Philadelphia: Saunders, 1917). A second contribution, especially well done, was Frazier's *Surgery of the Spine and Spinal Cord* (New York: Appleton, 1918), a volume containing all the known morphology, anatomy and pathology of the spinal cord of interest to the neurological surgeon.

A third volume, of great worth, has recently appeared in England. In spite of the limitations of this book to conditions closely associated with a single bone of the skull, two large volumes, beautifully illustrated, are the results of years of endeavor by Ballance to extract from the literature and his own wide experience all that is known about the temporal bone. He has searched into the darkest corners of medicine for knowledge and has reproduced as illustrations practically everything worth while that could be found. Although Cruveilhier's famous illustration of a presumed acoustic neurome is given (plate LXXXII), no mention of Cushing's book on the subject is noted. In addition to the illustrations a clear descriptive text, with many historical references, covers the conditions associated with the ear and the adjacent brain matter. No text could be more delightful reading. Although primarily an aural surgeon, his broad views of the field places a very valuable book in the hands of the neurologist and neurological surgeon.

HENRY VIETS.

Diseases of the Ear. By Philip D. Kerrison, M. D. 332 Illustrations in Text and 2 full pages in color. Second Edition—Revised and Enlarged. J. B. Lippincott Company, Philadelphia, Pa.

In 575 pages is presented the best book on diseases of the ear in the English language. Starting with the anatomy and passing through physiology the author considers the diseases of the ear in logical order, expressing clearly symptoms and describing acurately pathologic processes, emphasizing diagnostic points and using many well selected illustrations to simplify the understanding of the text. The detail of operations is one of the outstanding features of the excellent work.

The book is recommended to medical students, to general practitioners and to specialists, including not only otologists but neurologists as well.

Refraction and Motility of the Eye, with Chapters on Color Blindness and the field of vision. Designed for Students and Practitioners. By Ellice M. Alger, M. D., F. A. C. S. With One Hundred and Twenty-five Illustrations. Second Revised Edition. F. A Davis Company, Philadelphia.

A volume of 378 pages devoted to a review of the established principles of optics, considering refraction and muscles of the eye. As one reads the work he is convinced that the book was not intended for any except the most superficial readers. There is practically nothing new in it and much that is old has lost some of its value in reiteration and extension. The chapter on refraction methods is not to be commended. In fact, there is no excellent reason for its existence.

Eye, Ear, Nose and Throat Nursing. By E. Edward Davis, A. M., M. D., and Beaman Douglass, M. D. Second Revised Edition, with 32 Illustrations. F. A. Davis Company, Philadelphia, Pa.

This handy volume for the instruction of nurses in the four specialties has been recently revised and appears in attractive form. The anatomy of the parts is discussed followed by a description of the commoner diseases. The illustrations are few and in many ways the text needs further revision. In Ophthalmia Neonatorum, the authors have entirely forgotten the latest findings as to the cause of the disease and by neglecting to state that many cases are not the result of the Neisser organism parents are subject to undeserved criticism and the patient prevented from having the most approved treatment. Crede's prophylaxis has not been explicitly detailed. Under the head of Phyctenular Conjunctivitis, there is no mention of the treatment by tuberculin and under Serpiginous ulceration of the cornea the most efficient drug Ethylhydrocuprein is omitted.

In the consideration of ear douching an important point for the comfort of the patient is neglected. There is no mention made of allowing the cold water to run out of the tube before starting the irrigation.

In dealing with Politzerition they describe the Eustachian catheter and even suggest that a nurse might pass it.

The small part of the work devoted to nose and throat has a few illustrations and mentions many ancient therapeutic measures.

If a nurse consults a standard anatomy and a modern materia medica and has a broad clinical experience, the book is of value.

NEW YORK STATE MEDICAL LIBRARY.

Edited by Frances K. Ray.

Recent Accessions.

New Books

Allen, F. M., Stillman, Edgar and Fitz, Reginald. Total dietary regulation in the treatment of diabetes. 1919. (Rockefeller institute monographs, no. 11.)

American encyclopedia and dictionary of ophthalmology. vol. 17. 1921.

American medical association. Section on gastro-enterology. Transactions, 1920.

——. Section on pathology and physiology. Transactions, 1920.

Anders, J. M. Textbook of the practice of medicine. 14th ed. 1920.

Ballance, C. A. Bradshaw lecture on surgery of the heart. 1920.

——. Essays on the surgery of the temporal bone. 2v. 1919.

Bandelier, B. E. G., and Roepke, O. Tuberculin in diagnosis and treatment. 2d Eng. from 7th German ed. by W. B. Christopherson. 1913.

Brown, W. L. Sympathetic nervous system in disease. 1920.

Brunner, Conrad. Handbuch der wundbehandlung. 1916. (Neue deutsche chirurgie, v. 20.)

Burnham, A. C. The community health problem. 1920.

Castellani, Aldo, and Chalmers, A. J. Manual of tropical medicine. 3d ed. 1919.

Chiari, Ottokar. Chirurgie des kehlkopfes und der luftröhre. 1916. (Neue deutsche chirurgie, v. 19.)

Clayton, E. B. Medical gymnastics in medicine and surgery. 1920.

Daw, S. W. Orthopaedic effects of gun-shot wounds and their treatment. 1919. (Oxford war primers.)

Dock, L. L. Short history of nursing. 1920.

Drysdale, B. I. Labour troubles and birth control. 1920.

Findlay, Leonard. Syphilis in childhood. 1919.

Groves, E. W. H. Gunshot injuries of bones. 1915. (Oxford war primers.)

Harvey lectures, ser. 13-14, 1917-19.

Huggins, G. M. Amputation stumps; their care and treatment. 1918. (Oxford war primers.)

Index of the periodical dental literature. . . . for . . . 1911-15. 1921.

Kettle, E. H. The pathology of tumors. 1916.

Kidd, Frank. Common infections of the kidneys. 1920

Küttner, Hermann, ed. Verletzungen des gehirns. 3v. 1916-20. (Neue deutsche chirurgie, v. 18, pt. 1-3.)

Lane-Claypon, J. E. Child welfare movement. 1920.

Laveran, A. & Mesnil, F. Trypanosomes and trypanosomiases. 1907.

Love, J. K. Diseases of the ear in school children; an essay on the prevention of deafness. 1919.

Macleod, J. M. H. Burns and their treatment, including dermatitis from high explosives. 1918. (Oxford war primers.)

Miller, H. C. Functional nerve disease. 1920.

Morison, Rutherford. Bipp treatment of war wounds. 1918. (Oxford war primers.)

National birth-rate commission, Gt. Britain. Problems of population and parenthood. 1920.

Osler, Sir William. Brief tributes to his personality, influence and public service, written by his friends, associates and former pupils in honor of his seventieth birthday. 1920.

Page, C. M. A medical field service handbook. 1919. (Oxford war primers.)

Paget, Stephen. Sir Victor Horsley, a study of his life and work. 1920.

Park, W. H. Public health and hygiene. 1920

Physiological studies (first series) 1916. (Aberdeen university studies: no. 72.)

Proceedings and addresses at the reception and banquet in honor of Dr. Lewis Stephen Pilcher in celebration of the completion of his services of fifty years as a doctor of medicine. 1916.

Progressive medicine, 1921, vol. 1.

Rogues de Fursac, J. Manual of psychiatry. 4th American ed. 1916.

Roth, P. B. Orthopedics for practitioners. 1920.

Sahli, Hermann. Lehrbuch der klinischen untersuchungsmethoden. 6te aufl. v. 2, pt. 2. 1920.

Shera, A. G. Vaccines and sera. 1918. (Oxford war primers.)

Sherrington, C. S. Mammalian physiology, a course in practical exercises 1919.

Smedley, Emma. The school lunch: its organization and management in Philadelphia. 1920.

Smith, A. E. Block anesthesia and allied subjects, with special chapters on the maxillary sinus, the tonsils and neuralgias of the nervous trigeminus. 1920.

Stewart, J. P., and Evans, Arthur. Nerve injuries and their treatment. 2d ed. 1919.

Tansley, A. G. New psychology and its relation to life. 1920.

Tilney, Frederick, and Riley, H. A. The form and functions of the central nervous system, an introduction to the study of nervous diseases. 1921.

Tridon, André. Psychoanalysis; its history, theory and practice. 1919.

U. S. Public health service. Regulations for the government of the United States Public health service. 1920.

White, C. F., and Brown, W. H. Atlas of the primary and cutaneous lesions of acquired syphilis in the male. 1920.

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ALBANY
MEDICAL ANNALS

Original Communications

THE LIMITATIONS OF MILK IN THE DIET OF THE OLDER CHILD.

Read before the Pediatric Section of the Medical Society of the State of New York, Brooklyn, May 5, 1921.

BY FRANK VAN DER BOGERT, M. D.,
Schenectady, New York.

With unquestionably the best of motives, the various Federal and State organizations devoted to the Welfare of the Child, led by the Children's Bureau at Washington and the Department of Agriculture, have, for several years past, been advocating increased consumption of milk by the growing child. The National Dairy Council, whose purpose according to one of its own publications is "to encourage the production, stimulate manufacture, and increase the consumption of milk, butter, ice cream and cheese," through its members and with possibly less altruistic motives, is spreading wide the propaganda.

No one would, for one moment, question the value of a reasonable amount of milk as part of the general diet but we must agree with the statement of Pritchard when in discussing Malnutrition he says that "Excess of food, even though otherwise beyond criticism, is as dangerous as unsuitable food itself." The laity, always ready to accept new ideas of medical treatment reaching them through the press, have practically always gone to excess when carrying out these principles and over-enthusiasm upon the part of their advocates may easily defeat honest purposes.

In the endeavor to encourage milk drinking in large amounts, as a means of prevention and treatment of undernourishment, many statements have been made which will not bear criticism. For example, the Association for Improving the Poor, of New York City, in its Food Primer for the Home, answers the question: How much milk should children have? by saying that every child must have one pint of milk a day to supply material for good bones and teeth, and that every child ought to have at least one quart of milk a day because it is so easily built up into body tissue. Lydia Roberts, in her article upon malnutrition published by the Children's Bureau, says that milk is about the only liberal source of lime. If this is so it is pretty essential to the development of the teeth and bones but the opinion of those who have studied the development of the teeth seems hardly in accord with this view.

Truby King believes that the larger proportion of dry, hard or tough food a baby can be induced to masticate in his second year and onwards the better. If he takes an abundance of solid food, less milk will be needed. He cites the effects on jaws and teeth of feeding animals with foods not requiring mastication. Whether the animal be herbivorous or carniverous, jaws and teeth fail to develop properly, and the teeth decay if hard food is withheld. Dog fanciers have observed that if pups are not given tough, hard or dry foods but are restricted to cooked meat, milk, mush, etc., their jaws and teeth show defective development and the latter soon decay and blacken.

Sim Wallace in his interesting little book on Child Welfare writes: "The type of meal which is required for oral hygiene and the prevention of dental diseases should be fully developed at the end of the second, or at least at the end of two and one-half years, that is to say, the bulk of the food should require simple and thorough mastication. Milk should have by this time become a more or less negligible part of the diet."

One of the questions given by the New York State Board of Dental Examiners to applicants for license to practice dentistry, Jan. 27th last, reads as follows, "From what source are calcium and phosphoric acid obtained in suitable form for assimilation by the system to effect calcification of the teeth and bones?" The answer considered satisfactory to the member of the board responsible for the question was, "From the vegetable kingdom." Can it be possible that milk is essential for the proper development of body tissues in later childhood when no animal in its wild state obtains milk after it leaves its nursing mother? Therefore, no child *must* drink any amount of milk nor should they be begged, urged, or forced to take at least a quart.

The second and most prominent argument in favor of milk as a food in late childhood is its vitamin content. Raw milk, as a vitamin containing food, is an absolute necessity in infancy when milk is practically the only source of vitamin supply. Even here orange and tomato juice are advocated as an additional safeguard. Milk is by no means the only source of vitamins as is again demonstrated by the fact that wild animals and wild peoples get along without it. McCollum, in a speech before the National Dairy Conference in April 1918 could only emphasize that in a decade of experience he had not been able to make satisfactory diets except through the employment of either milk,-eggs or the leaves of plants as prominent constituents of the food supply.

As a matter of fact, Hess quotes Barlow and Chick and Hume as demonstrating the fact that raw milk must not be considered as having potent antiscorbutic properties.

Bolt in his paper on the Chinese Child calls attention to the extreme rarity in China of Rickets and Scurvy. Practically no cow's milk, I believe, is drunk in China.

Morse, under the caption: What Nature teaches us: says that as Nature provides a supply of breast-milk sufficient under normal conditions for the needs of the baby for nearly a year it seems evident that Nature did not intend breast-fed babies to have eggs, meat and green vegetables when they were six months old. He feels, however, that Nature teaches us nothing as to what the baby should eat after it is a year old. By the same reasoning it seems fair to assume that if Nature supplies breast milk for only one year it is not intended to give milk after the first year. We have little opportunity to observe wild peoples.

One of the few references which I have at hand is taken from a personal letter written me by Major W. C. Farabee who has spent some time in the Amazon Country. He writes that babies are given bones to suck and nibble at as soon as they can hold them. It is possible to observe the feeding habits of other animals and we know that it is their habit to begin solid foods early, gradually accustoming the digestive tract to the task before it. The development of any organ must depend upon the work given it to do. Young carnivôra pick and gnaw bones while still at the breast, herbivora begin early to crop. It is said that the cubs and kittens of all cats, from the lion down to the smallest wild cat, can digest raw meat very soon, and if they have been kept on milk slops, and are not doing well, a complete change to raw meat is almost miraculous in its rapid effect. Milk was unquestionably intended for the under-developed digestive tract of the infant. Where breast milk is not available, as among the birds, partially digested foods are administered in the early weeks. Young penguins, pelicans and cormorants take their food by thrusting the head down the throat of the mother, withdrawing semi-digested fish. Young buntings are fed, at first, regurgitated insects, later on insects in the raw state. Young flamingos feed each other.

These early methods are designed to protect the infantile digestive organs but are not continued.

The value of milk as a food for invalids argues in favor of its adaptability to a feeble digestive apparatus. Dr. Hornaday writes me that he finds it of great value in the diet of bears who come to the Zoological Garden with their stomachs almost ruined by improper feeding.

In the hope of learning something about the importance of milk in the diet of the older child, feeding experiments were carried on at the Schenectady Children's Home during 1919. The period of observation, ten weeks, was too short to make the results conclusive but they were at least significant.

The forty children were, as far as we could determine, healthy and ranged in age from 5 to 16 years, nineteen girls, twenty-one boys. They were divided into groups. One group was given milk twice daily, the other no milk, but, in order to satisfy, cocoa made with water was substituted.

Our findings were as follows:

Average gain of milk-fed girls	20 ounces
Average gain of no milk girls	13 ounces
Average gain of milk-fed boys	23 4/9 ounces
Average gain of no milk boys	23 5/9 ounces

Largest gain, a boy on milk, 9 pounds, 8 ounces. Largest loss, a girl on milk, one pound, eleven ounces. Four girls and two boys lost weight while taking milk, whereas, only two girls and one boy lost on the milk free diet.

It is safe to conclude, at least, that the absence of milk from the diet had little bad effect.

There are no statistics available as to the prevalence of malnutrition in past decades. Its seriousness has, however, only been appreciated within the past few years. Statistics obtained from the United States Department of Agriculture, though said to be unsatisfactory, point to an increase in per capita milk consumption in this country up to 1917. Incomplete records show that where in 1890—82.7 gallons were consumed; in 1917—92.8 gallons were taken.

If any inference is justifiable it is that increased milk consumption has not decreased malnutrition.

The treatment of malnutrition, as we are asked to accept it, is based upon the assumption that deficiency of food rather than deficiency of ability of the digestive organs is the cause. This I believe to be absolutely wrong. The immense majority of undernourished children that I see are not underfed, they are overfed, irregularly fed, unintelligently fed. They get more than enough to eat but no opportunity to digest it and when they instinctively resent further feeding, they are coaxed, begged, threatened and tempted to consume more milk in addition to what they realize has already made them unhappy and ill.

As suggested at the beginning of this paper there is no inclination to discount the importance of milk as a part of a well mixed diet. Practically all dairy products have their place in the dietary of the child but only upon the same basis as other food-tuffs, having in mind that it is the ability of the digestive apparatus to cope with them that determines their nutritive value.

If a child must be given salt-herring in order to produce an appetite for more milk, as happened in a case recently brought to my attention, if sugar must be added to make it palatable, if, as suggested in a 1921 edition upon Nutrition and Clinical Dietetics, where there is an objection to drinking milk as such, it must be incorporated into other dishes, cocoa, custards, milk soups, etc., in order to get it down, if it must be given at frequent intervals and at irregular hours, encouraging the most pernicious, of all dietetic habits, if bribery, deception and force must be resorted to in order to increase its consumption, it becomes a real source of danger and the last state of the child will certainly be worse than the first.

There seems to be but one simple and very obvious conclusion, that no food however perfect or protective can possibly nourish unless assimilated.

If the more-milk advocates will confine their efforts to the substitution of milk for tea and coffee and divert their educational campaign against pernicious dietetics habits, there will I believe be hope of a greater accomplishment.

DISCUSSION.

Dr. Charles Gilmore Kerley: It is refreshing to listen to a paper on a subject of this sort from one who has had a large practical experience. We all get too much of our information from the theories of those who have limited opportunities for observation.

The teaching that one quart of milk daily is essential for every child is faulty, and is the occasion of a good deal of dietetic trouble in run-about children.

The average child after the 18th month does best when given not over 16 to 20 ounces of milk daily. The majority of my patients do not get more than this amount after the 15th month. The use of large quantities of milk interferes with the appetite for vegetables and cereal which are most important for the growing child and for which milk cannot be substituted to his best interest. The habit of giving milk with the midday meal after three meals has been established is a very common practice by many, and it is a bad practice. We would hear much less of indigestion, bilious attacks, recurrent vomiting, etc., if the administration of milk was a good deal curtailed and only given morning and evening.

In the event that suitable food is not possible for the growing child, then milk in large amounts may be used advantageously as a substitute.

Dr. William H. Donnelly, *Brooklyn:* Food idiosyncrasy for milk is rather uncommon and early recognized. One quart of milk is only one glass at each meal and one after school. McCollum proved in a group of 84 children that in 42 the addition of one quart of raw milk produced a gain of as high as 80%. The other group failed to gain until they in turn got the raw milk. Preschool and school children are the victims of malnutrition pre-eminently and the addition of one quart of milk is not an excessive quantity.

Dr. Henry C. Sherman, Professor Food Chemistry, Columbia University, spoke in agreement with Dr. van der Bogert's and Dr. Kerley's advocacy of emphasis on vegetables and food requiring thorough mastication, but urged that one quart of milk per day in the diet of the growing child gives much better results than any smaller quantity. The benefit of a liberal allowance of milk in the diet is strikingly shown by experiments both on children and on laboratory animals.

Dr. Mary Rose, Associate Professor of Nutrition, Teachers' College, Columbia University (Chairman of N. Y. Nutrition Council): I have been responsible for formulating and teaching practical feeding programs for mothers at Teachers College, Columbia University. In the diet of the child, with the possible exception of the period from 1 to 3 years, a quart of milk is practical, supplemented, as we all agree, by liberal supplies of green vegetables, solid food inducing mastication, etc. At three years, it gives only one-third of the food value of the diet, at thirteen it is only one-fourth to one-fifth. Combination with other foods in cookery, keeps the total volume of the diet suitable.

In regard to milk as source of calcium, we have studied, in our laboratory, the storage of calcium in milk as compared with carrots, one of the vegetables relatively high in calcium. The storage was about equally good in carrots, but to get the day's quota from carrots alone was practically impossible. In general, I believe it is a safe policy to build up the child's diet around milk as the cornerstone.

Mary G. McCormick, Supervisor of Nutrition of School Children, N. Y., State Department of Education: Dr. Rose has spoken of the difficulty she met in attempting to meet the calcium requirement of adults by the use of vegetables. I took occasion to look up the percentage of calcium in whole milk and to determine the amount of calcium in one quart of milk. In order to obtain from other foods the calcium in one quart of milk it would be necessary to take the following amounts of any of these foods:

3½ lbs. Oatmeal—needed to give calcium in one quart of milk.
23 " Meat— " " " "
28 " White rice— " " " "
3.8 " Spinach— " " " "
4.6 " Carrots— " " " "
18.2 " Potatoes— " " " "

Milk cannot justly be classed with other foods as a source of calcium, for it occupies a unique place in this respect. One could not look to vegetables as a source of calcium and make a dietary that is digestible and practicable.

Dr. L. T. LeWald, New York City: In a Roentgen study of several cases of dilation of the stomach and also a series of cases of ptosis of the stomach, referred to me by Dr. Kerley, both Dr. Kerley and myself have reached the conclusion that over feeding, particularly with milk in addition to other articles of diet, has been a material factor in the production of dilatation and ptosis of the stomach. Furthermore, improvement in these conditions has been brought about by limiting the quantity of fluids, particularly milk.

Dr. Elias H. Bartley: While it is a good thing to put on the brakes to check us when a theory is likely to run away with us, I think it would be an unfortunate thing for this paper to be published without the discussion to which we have just listened. I think the general impression drawn from this paper, will be against the general practice, and the accepted deductions drawn from our experience and from animal experience of the past few years.

I am a believer in the necessity of milk as a part of the diet of every growing child. I do not believe I have been deceived in my observations in a practice of over thirty years, nor do I believe those observers of carefully conducted animal experiments have been deceived.

I hope the discussion will be published with paper.

Dr. van der Bogert: I do not wish the paper misinterpreted. There is no intent to discredit milk as part of the dietary. I simply object, and object strongly, to the present practice of urging, coaxing, bribing and forcing the child to take a pint or a quart without regard to the ability of the digestive tract to digest and assimilate it. It must be remembered that the laboratory animals referred to cannot be made to consume any more than they willingly take.

ANALYSIS OF A YEAR'S SURGICAL WORK, 1920, OF E. MacD. STANTON, M. D., F. A. C. S., AND C. W. WOODALL, M. D.

Read before the Staff Clinical Meeting, Ellis Hospital, Schenectady, N. Y., May, 1921

By C. W. WOODALL, M. D.

The following report of surgical cases treated by Dr. Stanton and me at the Ellis Hospital during the year 1920 has been prepared similar to reports of previous years, for the combined purpose of studying the various types of cases in groups, of determining the morbidity and mortality statistics and to ascertain if possible any errors of judgment or technique which might have been avoided.

During the year 547 patients were treated by us at the Ellis Hospital of whom 474 were operated for one or more conditions, many of them having two or more operations performed at the same time, such as tonsillectomy and hemorrhoids, laparotomies and vaginal repairs, or a major operation accompanied by the removal of some small benign growth, pulling of teeth, etc. For convenience and the purpose of study all operations have been listed separately, thus making the total number of operations somewhat greater than the number of patients operated. In addition to those operated, 73 patients were treated in the hospital for conditions not requiring operation, this last list comprising a large number of fractures, contusions, abrasions and an occasional medical condition.

The total number of hospital deaths were 27. These will be analysed and discussed in the latter portion of this paper and not taken up under separate headings.

Acute Appendicitis.

Fifty-two cases were operated for acute appendicitis. Twenty-seven or over fifty per cent. of these cases had either gone on to frank abscess formation, or the presence of granulation tissue made them potential abscesses and necessitated drainage. In eight of these drainage cases the abscess was so extensive and the condition of the patient so poor that no attempt was made to remove the appendix, it being believed that simple drainage would give the patient the best opportunity for immediate recovery and that a secondary appendectomy could be performed later if necessary.

Twenty-five patients were operated during the early stage of the disease before drainage became necessary. In addition there was one case of mild acute appendicitis who refused operation and recovered under medical treatment.

In the fifty-two operated cases there were seven deaths or a total mortality of thirteen per cent. Six of these deaths occurred in drainage cases, while the one which followed a simple appendectomy was due to a post-operative pneumonia. This marked difference in mortality rate between early and late cases (four per cent. as against over twenty-two per cent.), serves to emphasize what has been known for so long, *viz.*, that the only safe procedure in acute appendicitis is to operate early.

Chronic Appendicitis.

Eight cases were operated under the diagnosis of chronic appendicitis and were later discharged without complications of recovery. In our report of last year we spoke at some length regarding chronic appendicitis and its relation to that large group of patients, best typified by the enteroptotic young woman, who comes to the physician's office complaining of pain in the appendix region without other symptoms to support a diagnosis of chronic appendicitis. All of these eight patients who were operated, however, presented a definite symptom complex pointing toward the appendix as the causative factor and in each case there was found an appendix showing gross pathological changes to account for the trouble. As far as heard from all of these patients have been definitely relieved of their symptoms by the appendectomy.

In addition to those patients operated for diseased appendices there were thirty-seven other cases in which appendices were removed incidentally while performing a laparotomy for some other cause. Some few of these appendices showed gross changes such as we are accustomed to associate with chronic appendicitis, and a very large proportion of them were reported by the pathological laboratory as microscopically chronic appendicitis, and yet, as far as I have been able to ascertain, none of these patients complained of any symptoms which could be attributed to any offending appendix. I believe that chronic appendicitis *in vivo* bears but slight relation to chronic appendicitis *in vitro*.

Gall Bladder.

Fourteen patients were operated for disease of the gall bladder or ducts. Eight of these were cases of gall stones accompanied by more or less inflammation of the gall bladder. In one case there was a sub-acute perforation of the gall bladder into surrounding chronic inflammatory tissue. One patient had a common duct stone in addition to stones in the gall bladder. Three of the fourteen had empyema of the gall bladder with accompanying occlusion of the cystic duct by impacted stones. In two cases there was chronic cholecystitis without stone formation.

A simple drainage by the Taite-Oschner technique was done in ten cases. In the remaining four the gall bladder was removed. These four cholecystectomies comprised two cases of gall stones, one case of cholecystitis and the case of sub-acute perforation. Outside of one death, in the case of sub-acute perforation, there were no complications of convalescence.

Stomach and Duodenum.

Fifteen cases were treated for diseases of the stomach and duodenum, as follows: ulcer of stomach, six; ulcer of duodenum, four; carcinoma of stomach, five.

Four of the stomach ulcers were acute perforations. Three of these perforations were operated, the perforation being closed in with purse string sutures and reinforcement. The remaining perforated case died shortly after admission to the hospital, before operation could be performed. One case of chronic peptic ulcer was treated by a posterior gastro-enterostomy. The remaining case of stomach ulcer received a blood transfusion for severe hemorrhage without further operative procedure.

Of the four duodenal ulcers two were cases of acute perforation and were closed in the manner above described. In one case a posterior gastroenterostomy was done for obstruction. The remaining case was not operated but treated medically. The five cases of cancer of the stomach were all operated. In three a posterior gastro-enterostomy was done for obstruction, in one an anterio gastro-enterostomy and in the last case an exploratory incision with removal of the lymph node for microscopical examination.

In this series there were three deaths, one of which was post-operative.

Tubes and Ovaries.

Forty-six patients were treated for diseases of the tubes and ovaries, forty-four of whom were operated. The two non-operated cases being acute salpingitis which were treated medically. In addition to the above there were nine patients in whom the tubes and one or both ovaries were removed incidentally during the course of some other operative procedure such as hysterectomy.

Those operated comprised the following pathological conditions:

Acute salpingitis	6
Chronic salpingitis	24
Ovarian cyst	3
Oophoritis	3
Tube-ovarian abscess	4
Ectopic pregnancy	3
Carcinoma of ovary	3

There were no deaths or complications of convalescence in this series.

Operations on Uterus.

Sixteen supra-vaginal hysterectomies were performed for the following conditions:

Uterine fibroids	7
Atrophic uterus	3
Epilepsy	1
Carcinoma	1
Myometritis and endometritis	1
Pregnancy (kidney of pregnancy)	1
Incidentally in case of carcinoma of ovary	1
Fibroid and pregnancy (Poro-operation)	1

There were five Caesarian Sections done for the following pathological lesions:

Fibroid blocking pelvis	1
Nephritis of pregnancy	1
Contracted pelvis	3

Two of these babies were born dead, one of them being a six months foetus. Fourteen curettages were performed as follows:

Hydatidiform mole	1
Six months' pregnancy complicated with mitral stenosis	1
Pernicious vomiting of pregnancy	2
Incomplete abortion	5
Cervical constriction	1
Polypoid endometritis	1
Exploratory for hemorrhage, no noteworthy pathology found	3

In addition to the above, there were two cases of incomplete abortion, one in which the uterus was packed but not curetted. In the other a blood transfusion was done for severe hemorrhage.

Two vaginal hysterectomies for prolapse.

Two cases of threatened abortion were treated expectantly and recovered without operation.

There were two deaths in this series which will be reported later.

Vagina and Cervix.

The following operations were performed on the vagina and cervix.

Erosion of cervix	11
Cauterized	2
Amputated	8
Excision of diseased tissue and repair	1
Lacerated perineum, repaired	5
Pelvic abscess, vaginal puncture	1
Adherent cliterus loosened	1

There were no deaths or complications of convalescence in these cases.

Intestinal Obstruction.

Three cases of intestinal obstruction other than those due to hernias were operated. All were caused by obstruction of the small intestine, due to the following pathology:

Mesenteric inflammatory mass following injury—lateral anastomosis	1
Adhesions, loosened	1
Omental band, loosened	1

These patients recovered without complication.

Laparatomies not otherwise listed.

Exploratory, nine with the following findings.

Adhesive peritonitis	1
Adhesions	2
Inflammatory mass in region of sigmoid	1
Hyperplastic lymph nodes	1
Negative, exploratory laparatomy accompanying ventral hernia	1
Meckles diverticulum	1
Sub-diaphragmatic abscess—drained	1
Pelvic abscess—drained	1

Diseases of the Urinary Tract.

The following cases were treated for diseases of the urinary tract.

Kidneys.

Pyonephrosis and stones, nephrectomy	2
Pyelitis—cystoscoped only	1
Hydronephrosis—cystoscoped only	2
Perinephritic abscess, drained	1
Phosphaturia—cystoscoped	2

Ureter.

Ureteral calculus, stone removed	2

Bladder.

Calculus, crushed and removed through urethra	1
Ulcer of bladder, cystoscoped	1
Cystitis, cystoscoped	2

Urethra.

Acute gonorrhea	2

Hernias.

Forty-six patients were operated for some type of hernia as follows:

Right inguinal	19
Left inguinal	10
Double inguinal	8
Right femoral	1
Left femoral	1
Umbilical	2
Ventral	4
Epigastric	1

Thirty-six of these were operated under general anaesthesia, ten under local novocaine anaesthesia.

Two of the inguinal and one femoral hernia were strangulated, seven of the hernias were accompanied by some other operation.

Tonsils and Adenoids.

Sixty-five patients were operated for enlarged tonsils and adenoids, all but three of whom had the tonsillectomy performed under ether anaesthesia. Three were done under local novocaine anaesthesia.

Phallic Diseases.

Twenty-one patients were operated for conditions of the male genital organs as follows:

Carcinoma of prostate—exploratory—inoperable	1
Acute prostatitis	1
Phimosis—circumcision	8
Hydrocele—sac excised	1
Painful atrophy of testicle—excised	1
Varicocele—veins resected	1
Chronic epididymitis—non-tuberculous—resected	1
Tuberculous epididymitis—resected	1

Malignant Tumors.

Thirty-one cases were operated for malignant growths as follows:

Carcinoma	27
Face—epithelioma—removed	6
Neck—exploratory—inoperable	1
Breast—radical removal	5
Stomach—palliative operations	5
Liver—explored—inoperable	1
Caecum—explored—inoperable	1
Mesentery—explored—inoperable	1
Uterus—Hysterectomy	2
Ovary—excised	2
General abdominal carcinomatosis—explored	1
Bladder—explored—inoperable	1
Prostate—explored—inoperable	1
Sarcoma	4
Retropharyngeal—inoperable	1
Wrist—recurrent—removed	1
Leg—explored—inoperable	1
Kidney—inoperable	1

Benign Tumors.

Twenty-four patients were operated for the removal of benign growths such as sebaceous cysts, angiomata, papillomata, lipomata, polyps, hydatidiform mole, coccygeal cysts, dermoids cysts and tendon cysts. These were largely done under local anaesthesia. There were no complications of convalescence in this group.

Empyema.

Five cases were operated for empyema of the chest, in each case resection of a rib being done. One case was operated under local anaesthesia, the remaining four under ether. These patients all recovered without hospital complication.

Adenitis.

Five cases of tuberculous adenitis of the neck were operated, one of these an extensive block dissection of glands and gland bearing fascia. The other four had localized glands removed with as little disturbance of surrounding tissue as possible.

One case of non-tuberculous adenitis of inguinal glands had excision of hyperplastic glands and drainage.

Exophthalmic Goitre.

Two cases of exophthalmic goitre were operated under ether anaesthesia. They left the hospital without complication.

Infections.

Abscesses.

Ten cases of localized abscess formation of various parts of the body were incised and drained.

Osteomyelitis.

Eight cases of osteomyelitis of various bones were drained.

Cellulitis.

There were two cases of cellulitis of the arm, one being incised and drained, the other recovering without operation.

Tuberculosis of bones.

Knee, resections of joint	2
Knee, cast applied	6
Hip, cast applied	5
Spine, cast applied	5

Fractures.

During the year we treated forty-six patients in the hospital for fractures. It will be noted that an unusually large percentage of these were cases of fractured skull (over twenty-three per cent.). There seemed to be an epidemic of skull fractures during the summer and fall, most of the cases being due to automobile accidents.

Skull	11
Occipital—non-operated—recovered	1
Parietal—non-operated—recovered	1
Parietal—decompression operation—recovered	3
Parietal—decompression operation—died	3
Base non-operated—died	3
Clavicle	2
Humerus—neck	6
Humerus—supra-condylar—open-reduction	2
Humerus—supra-condylar—non-operated	1
Colles	1
Ribs	4
Vertebra—dorsal	2
Pelvis	4
Femur—spontaneous pathological fracture	1
(Hip amputation for old osteomyelitis and osteoporosis.)	
Femur—simple fracture	2
Tibia and fibula—simple fracture	1
Tibia and fibula—compound fracture	2
Fibula alone, shaft	2
Potts fracture	3
Metatarsal	1
Toes	1

Orthopedic and Plastic Surgery.

Hammer toe—amputated	1
Resection of burn scar	2
Cleft palate and double hare lip	1
Tenotomy for deformed foot	1
Resection of cervical rib	1
Plastic for webbed fingers	1
Cleft palate—Brophy operation	1
Removal of infected bursa from wrist	1
Removal of exostosis from fibula	1
Skin graft	2
Removal of floating knee cartilage	1

Accident cases not otherwise listed.

Operative.

Foreign bodies. Seven cases had small foreign bodies removed from various parts of the body.

Gun Shot Wounds.

Head—bullet removed	1
Chest—bullet removed	1
Thigh—bullet removed	1
Abdomen—exploration	1
Hand—amputation of fingers	1

Lacerations.

Thirteen cases had lacerations of various parts of the body sutured.

Crushing Injuries.

Fingers—amputation	3
Foot	1

Injuries not operated.

Contusions.

Thirty-two patients were treated for contusions, sprains and lacerations of more or less severity either separately or in conjunction with more severe injuries without the necessity of operation.

MISCELLANEOUS.

Ingrowing toe nail	1
Syphilis	2
Acute septic arthritis	1
Aplastic anaemia (blood transfusion)	1
Extraction of teeth incidental to operation	3
Acute sciatica—nerve stretched	1
Varicose veins of leg—removed	1
Sternum curetted—no noteworthy pathology	1
Pulmonary tuberculosis	1
Fecal impaction	1
Intestinal adhesions (not operated)	1
Chronic eczema	1
Neurasthenia	2
Epilepsy	1
Acute tonsilitis	2
Blood transfusions citrate method	6

Deaths.

Among the 547 patients treated by us at the hospital, there were twenty-seven deaths, a mortality rate of less than five per cent.

When we attempt to classify these cases the first outstanding fact which comes to our notice is that fourteen out of the twenty-seven deaths or just over half may be classified as having been hopeless from the first, six or forty-three per cent of the hopeless cases or twenty-two per cent of the total deaths were fractures of the skull. Of course, not all skull fractures are hopeless but in our opinion the six in this group were quite hopeless from the first. It is thus seen that the modern automobile and motorcycle in this district at least, contributes one single type of injury which becomes a really important factor in the surgical mortality of the community. The remaining eight cases classified as hopeless were as follows:

Fracture of the lower cervical vertebrae with complete paralysis below zone of fracture	1
Crushed pelvis, ruptured bladder and other injuries	1
Gunshot wound involving the large mesenteric vessels	1
Terminal aplastic anemia	1
Inoperable cancer of bladder	1
Hemorrhage from oesophageal varix due to cirrhosis of liver	1
Perforated gastric ulcer dying 1½ hours after admission without operation	1
Diabetes and tuberculosis with gangrene of leg	1

Turning now to the thirteen deaths occurring in patients suffering from diseases which did not in themselves give a hopeless prognosis we are at once struck by the fact that 7 or more than half of these deaths occurred in cases of acute appendicitis.

Notwithstanding the fact that the essential symptomatology of acute appendicitis has been thoroughly recognized for the past twenty-five years and that this essential symptomatology is so typical that most cases should be diagnosable from the history alone, given over the telephone if it is inconvenient for the doctor to go to the patient, also, notwithstanding the fact that cases operated within the first 24 to 36 hours of the disease almost invariably recover and notwithstanding the fact that the public is educated to the necessity of early operation, and lastly, notwithstanding the fact that of all surgical diseases appendicitis is the most amenable to safe and satisfactory cure during the first day or day and a half of the disease and one of the most dangerous after this period; nevertheless, the mortality from appendicitis in the year 1921 is probably quite as high as it was ten or a dozen years ago and quite possibly it is as high as it was fifty or a hundred years ago.

Six of our fatal cases were in patients referred to us from three to six days after the onset of symptoms. The history was in all cases typical. In some cases the essential history was more or less camouflaged by extraneous data but the important points were there nevertheless.

Even early acute appendicitis is not an absolutely safe disease. We had one death in a twenty-four hour acute case who developed pneumonia a few hours after the operation.

The remaining six deaths comprise a Caesarian section on a previously much manipulated case. This patient did well for two days and then developed a typical acute endocarditis with death on the sixth day. I know of no way to have avoided this fatal complication except to have had this patient referred before the attempts with the forceps.

A poorly nourished baby of five months died following a Brophy operation for cleft palate. This child was losing ground rapidly before the operation and I see no way of having avoided the death in this case.

A man, age forty-three died eleven days after an operation for a twenty-four-hour old perforation of a gastric ulcer. This man was almost moribund when admitted with a late general peritonitis. He had had a previous perforation closed in a Massachusetts hospital a few months before. The enormous size of the perforation, the induration in the walls of the stomach and the adhesions made a really satisfactory closure out of the question. We reinforced the closure with omentum but about six days later had a recurrence of the perforation and death. We have no regrets to offer in this case.

A male, age thirty-seven, died of acute miliary tuberculosis two months after a resection of his knee for tuberculosis. Miliary tuberculosis is one of the ever present dangers associated with operations on tuberculous joints. Conservative treatments had been tried for eight years in this case without avail. I believe that the operative risk was justifiable in this case.

A male, age twenty-eight, operated for gall stones with a subacute perforation of the gall bladder died two days after a cholecystectomy. As a hind sight in this case, I am sorry that we did anything but a simple cholecystotomy. However, the indications for cholecystectomy were apparently perfectly plain and we did not at the time consider this patient a bad risk. However, this was a male gall stone case and experience of all surgeons has shown that gall bladder operations on the male are several times as dangerous as similar operations on females of similar age groups.

A woman, age thirty-four, died twelve days following a hysterectomy performed because of toxemia of pregnancy at two and one-half months. I believe that a curettage instead of a hysterectomy should have been performed on this case. However, this patient had nearly died following each of two previous curettages for the same cause. The obstetrical consultant thought hysterectomy the safest. The patient demanded a hysterectomy and we thought that a hysterectomy would be reasonably safe.

In conclusion, I will say that no death can be traced to an error in surgical technique or a surgical accident. The postoperative pneumonia was I believe due to the patient vomiting during the early stages of the anaesthesia. In fourteen of the deaths occurring in cases which we believe to have been hopeless from the nature of the pathology present, hind sight gives us no reason to believe that we should have handled differently any of the six cases dying from appendicitis which were referred to us after the second day. It is a fact worthy of note and emphasis that in a community such as Schenectady in the year 1920 more than half of the cases of appendicitis referred to us for operation should have been received after a safe period for operation had passed. The one case which we decidedly regret was that of the hysterectomy performed for toxemia of pregnancy.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.
BUREAU OF VITAL STATISTICS.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

DEATHS FOR THE MONTH OF MARCH, 1921.

Tuberculosis	14	Bright's Disease	8
Typhoid Fever	0	Apoplexy	13
Diphtheria	1	Cancer	14
Scarlet Fever	1	Accidents and Violence	6
Whooping Cough	0	Deaths under one year......	20
Measles	1	Deaths over 70 years.......	40
Diarrheal Diseases	2	Death rate (nonresidents included)	15.86
Pneumonia	2	Death rate (nonresidents excluded)	12.79
Broncho Pneumonia	5		
Influenza	0		
Grippe	0		

Deaths in Institutions.

	Non-Res.	Res.		Non-Res.	Res.
Albany Hospital	10	16	Homeopathic Hospital .	5	6
Albany Hospital T. S. ..	3	2	Home for the Aged....	1	1
St. Peter's Hospital ...	4	6	St. Margaret's Home ..	5	1
Hospital for Incurables.	2	..	Public Places	0	2
Child's Hospital	1	2		——	——
Nurses' Training School	0	2		32	43
Maternity Home	0	4	Births		214
Albany County Hospital	1	1	Still births		5

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	0	Whooping-cough	26
Scarlet Fever	27	Tuberculosis	21
Diphtheria and Croup	8	Mumps	2
Chickenpox	42	Pneumonia	31
Smallpox	0	Influenza	4
Measles	251		———
German Measles	0	Total	412

Number of days quarantine for scarlet fever:
Longest...... 40 Shortest...... 30 Average.... 36 14/19

Number of days quarantine for diphtheria:
Longest....... 31 Shortest....... 11 Average....... 22

Fumigations:
Rooms................ 115 Buildings.............. ..35

Milk bottles disinfected 1,298

Communicable Diseases in Relation to Schools.

	Reported D.	S.F.	M.
Public School No. 1	1	..	7
Public School No. 2	..	.	2
Public School No. 3	..	..	1
Public School No. 4	..	..	4
Public School No. 8	..	..	2
Public School No. 11	..	..	1
Public School No. 13	..	..	1
Public School No. 14	..	..	7
Public School No. 15	..	..	9
Public School No. 16	..	..	5
Public School No. 17	..	4	30
Public School No. 19	..	..	22
Public School No. 20	..	..	14
Public School No. 21	..	..	1
Public School No. 22	..	..	1
St. John's School	1	..	..
Female Academy	..	..	4
St. Joseph's Academy	..	..	5
Lady Help of Christians	..	1	3
Albany Orphan Asylum	..	..	19
St. Ann's School	..	1	3

MISCELLANEOUS.

Cards posted for communicable disease	188	Children examined for employment certificates	7
Cards removed	151	Number of employment certificates issued	6
Notices served on schools	362	Taking specimens of blood for Wassermanns	0
Notices served on stores and factories	27	Taking smears for Gonococci	0
Postal card returns sent to doctors	205	Cultures	10
Postal card returns received from doctors	151	Postal cards sent to milk dealers	92
Inspections and reinspections	215	Dogs examined for rabies	1
Vaccinations	14	Re-examinations for rabies	2
Vaccination dressings	48		

Tuberculosis.

Living cases on record March 1, 1921		603
Cases reported:		
By card	17	
Dead cases by certificate	6	23
		626

Dead cases previously reported	7	
Dead cases not previously reported	6	
Removed	37	
Died out of town	0	
Recovered	0	
Unaccounted for	0	50
Living cases on record April 1, 1921		576
Total tuberculosis death certificates		13
Non-resident deaths:		
Albany Hospital Camp	3	
C. F. L. Pavilion	0	
County Hospital	1	
St. Margaret's House	0	
City at large	0	4
Resident deaths		9

Visits to cases of tuberculosis	168
Miscellaneous visits	12
Visits to physicians	18

Laboratory Report.

Diphtheria.

Initial Positive	15	Unsatisfactory	2
Initial Negative	151		
Release Positive	22	Total	297
Release Negative	107		

Sputum for Tuberculosis.

Positive	42	Unsatisfactory	0
Negative	133		
		Total	175

Widals.

Positive	0	Unsatisfactory	1
Negative	31		
		Total	32

Meningococcus.

Positive	0	Negative	0
		Total	0

Wassermann tests (positive 93)	355	Gonorrhea examinations (positive 33)	88
Milk analyses	234	Miscellaneous examinations	0
Water analyses	0		
Pathological examinations	0	Total examinations	1,181
Cases assigned	51	Calls made	91

Division of Sanitation.

Complaints		136	Garbage collected from 1st District, bbls.	260
Inspections		59	Garbage collected from 2nd District, bbls.	195
Plumbing	11		Garbage collected from 3rd District, bbls.	325
Sanitary	48			
Reinspections		67		
Plumbing	6			
Sanitary	61			

Hearings.

Hearings	2	Cases heard	2

Class of Cases.

Filthy premises	2

Disposition of Cases.

Reinspection	2

Division of Plumbing, Drainage and Ventilation.

Inspections		73	Smoke	0	
Old houses	44		Blue or red	1	
New houses	29		Peppermint	3	
Permits issued		11	Water test	7	
Plumbing	10		Houses examined		23
Building	1		Re-examined		39
Plans submitted		9	Valid	18	
Old buildings	5		Without cause	5	
New buildings	4		Violations		0
Houses tested		11			

Report of Removal of Dead Animals.

Horses removed	13	Cats removed	36
Dogs removed	29		
		Total	78

DIVISION OF MARKETS AND MILK.

Public market inspections	25
Market inspections	152
Fish market inspections	18
Fish peddler inspections	0
Slaughter house inspections	2
Rendering establishment inspections	1
Pork packing house inspections	5
Hide house inspections	0
Milk depots inspected	32
Stores inspected	249
Dairies inspected	15

Milk cans inspected	179
Milk cans condemned	0
Lactometer readings	43
Temperature readings	43
Fat tests	16
Sediment tests	24
Chemical tests	0
Cows examined	0
Cows quarantined	0
Cows removed	0
Complaints investigated	3
Milk houses inspected	15

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR APRIL, 1921.—Number of new cases, 171; classified economically: Free, 48; bed cases, 18; prenatal, 13; dispensary social service, 0; tuberculosis (pos.), tuberculosis (super.), 11; venereal, 6. Paid, 123; limited means bed cases, 66; metropolitan bed cases, 37; metropolitan prenatal, 20; Western Union, 0. Cases carried over from last month, 642; bed cases, 141; prenatal, 47; dispensary social service, 0; tuberculosis (total), 360; venereal, 94; Western Union, 0. Classification of bed cases: Medical, 86; surgical, 4; obstetrical, 32; prenatal, 33; confinements, 23; maternity, 9; miscarriages, 2; number of babies born, 32.

Visits for Nurses (all departments), 1,812; for bed care, 1,264; prenatal instruction, 89; tuberculosis (super. and inst.), 60; venereal dis. instr., 2; general social service, 119; for other purposes, 198; dispensary social, 0; supervision, 80.

Source of Nursing Cases.—Metropolitan agents, 38; doctors, 72; nurses, 4; dispensary, 1; family or friends, 21; other sources, 18.

Disposition of Bed Cases.—Discharged recovered, 92; discharged improved, 37; discharged unimproved, 20; discharged dead, 4; discharged to other care, 43; carried, 119. Disposition of other cases: Prenatal—discharged to maternity care, 30; discharged to hospital, 10; discharged to other care, 0; carried, 44. Dispensary social service—dis. dispensary care, 0; carried, 0. Venereal—discharged cured, 0; discharged temporarily, left without permit, 2; discharged to other care, 0; carried by dispensary, 32; carried under super., 0; carried under care at the House of Good Shepherd, 19. Tuberculosis—Discharged dead, 7; discharged, left town, 0; discharged, not T. B., 0; carried (positive, supervision), 364. Total number of cases carried over into May, 578.

South End Dispensary Report.—Number of clinics, 89; surgical, 9; medical, 10; gynecological, 9; prenatal, 0; eye and ear, 19; venereal, 13; nerve, 3; nose and throat, 7; skin, 6; children, 9; lung, 4; children's lung (observation clinic), 4; clinics with doctor attending, 82; clinics without doctor attending, 7; number of new patients treated, 191; number of old patients treated, 814; total number of patients, 1,005.

THE MEDICAL CORPS OF THE NAVY.—For the present appointments will be made directly into the Medical Corps of the Navy instead of by preliminary enrollment in the Naval Reserve Force.

The physical requirements will remain the same, but the professional examination will be on the subjects of General Surgery, General Medicine, General Hygiene and Sanitation. There will also be a practical examination.

As a consequence of this change successful candidates who may be ordered in attendance upon a course of instruction at the Naval Medical School will be given an examination upon completion of such course for the purpose of determining the value they have received from the course of instruction, but not with a view to determining their position in the regular service, this being accomplished by the entrance examination.

The Bureau of Medicine and Surgery, Navy Department, Washington, D. C., will be pleased to furnish any further information to prospective candidates upon written inquiry to this Bureau.

Satisfactory Evidence of Citizenship.

Any one of the following may be considered as satisfactory proof of citizenship:

If Native Born,

(a) A *duly verified* copy of a public or church record of the birth.

(b) The affidavit, under oath, of the physician, midwife, or other person present at the birth.

(c) In cases where neither (a) nor (b) can be obtained by the candidate, the affidavit of either parent.

(d) In cases where the candidate certifies that no one of the above is obtainable, the affidavits (under oath) of two reputable citizens acquainted with him. Each of these affidavits should state the facts within the knowledge of the deponent upon which he bases his statement as to the citizenship of the candidate, as, for example, that he has known the candidate since birth, that he knew his parents, that he knew him to be a bona fide voter, or as the case may be.

If Foreign Born,

(a) Certificate of naturalization, under the seal of the court in which naturalized.

(b) Certificate of naturalization, under the seal of the court in which naturalized, of the parent during the minority of the candidate; together with the affidavit of a parent that the candidate is the child of the parent whose certificate of naturalization is submitted.

(c) In special cases where the candidate certifies that neither (a) nor (b) is obtainable, the affidavits of two reputable citizens acquainted with him (See Par. (d) under Native Born Citizens). As every naturalization is a matter of record in some court, these affidavits will be accepted only in very exceptional cases, and on the understanding that the candidate shall later submit a proper certificate of naturalization.

THE UNDERNOURISHMENT OF CHILDREN.—In Vienna where exact medical science is highly developed and where, before the war, medical students of all nationalities flocked to sit at the feet of the great masters who put the finishing touches to medical education, a new system of measuring the undernourishment of children with scientific accuracy has been developed.

Professor Clemens von Pirquet, head of the Department of the Diseases of Children in the University of Vienna, who developed the plan, has christened it the Pelidisi system. It is based upon the relation of the length of the body in a sitting position to its weight.

Regarding the ratio in the normal adult as 100, the average Pelidisi of the normally well-nourished child is 94; the lowest plane classified is 76, and this figure indicates undernourishment closely approximating actual starvation.

Children classified under 90 require prompt relief, if the diseases of subnutrition are to be avoided. The American Relief Administration European Children's Fund, which has been conducting child feeding operations on a large scale in Vienna, has been giving a free meal daily to practically all children up to and including class Pelidisi 93, but in other Austrian provinces the feeding has been confined chiefly to children of a Pelidisi up to 91 only, because in the provinces investigations are necessarily slower and control more difficult.

How serious the undernourishment is in Austria may be gathered from the fact that examination of 50,324 children, between six and fourteen years showed 30,817, or more than three-fifths, had a Pelidisi of 93 or lower. In fact, of these only 6,382 even attained to the 93 class.

Seven thousand eight hundred ninety-five showed a Pelidisi below 89. There 4,629 only with a Pelidisi of 90; 5,677 with a Pelidisi of 91; 6,530 with a Pelidisi of 92. These were in the Austrian provinces of Salzburg and Upper Austria where the American Relief Administration was furnishing supplementary meals to 22,000 daily, that is to say, to all children including a Pelidisi of about 91½. In the city of Salzburg, at the time the examinations were made, it was found that the Administration was feeding children to include the class of Pelidisi 90, and only 110 of the 675 children examined fell into the Pelidisi classification 91.

Herbert Hoover, the chairman of the American Relief Administration European Children's Fund, hopes to continue the feeding of Austrian children to the number of 300,000 during the present winter. The complete program for child feeding in Europe of the fund calls for the feeding of approximately 2,500,000 children, not including Germany, where the American Quakers believe that 1,000,000 must have assistance from America this winter if they are to survive.

Believing that Americans never have, and never will, fight women and children, the American Relief Administration is assisting the Quakers in this work, and will raise 50 cents for every dollar found by the Quakers.

The cost of this feeding is figured at $3.00 per child per month, but with the cooperation of their own governments and of the charitable organizations in the countries where it is carried on, two-thirds of that expense is met by the countries directly benefited, in the form of rent, cartage, internal transportation, labor, etc., so that the cost to American charity is reduced to about $1.00 per month per child.

So carefully has the work been organized that the overhead has been brought down to less than one-half of one per cent., a degree of efficiency rarely equalled in the annals of relief work. Even this overhead, however, does not come out of charitable contributions but is met from credit balances from the sale of Food Drafts in America. Therefore every dollar contributed for the Children's Fund puts one dollar's worth of food into a child.

SCHOOL HEALTH IN MINNEAPOLIS.—Some points developed by the school survey recently conducted in Minneapolis by Dr. Taliaferro Clark, of the U. S. Public Health Service, at the request of the city health authorities, seem to be of general interest.

Minneapolis is governed by "boards," among which are those on Health and on Education, whose contact in the public schools is a perennial source of friction in many cities. Minneapolis prevented this when the board of education appointed the commissioner of health to be director of school hygiene, thus assuring a thorough liason. The report recommends that this liason be extended to the health and school nursing services, thus saving a large amount of duplication in follow-up work and home visiting and leaving a number of nurses free for detail to work that must now be largely neglected. An increase of the nurses to one for each thousand pupils is recommended.

An increase in the number of school medical examiners to one for each 3,000 pupils is also urged. The shortage in these inspectors is forcing them largely to limit their work to finding and making mere statistical record of hampering physical defects and leaving them little time for correcting these. Lack of time for careful diagnosis is also compelling the inspectors merely to notify parents that their children should be sent to the family physician for examination, a piece of advice that is very largely ignored.

Until enough inspectors can be employed, the time of the present force can be conserved by making physical examination of children in their first, second, and last years only; in the first to determine what defects they may have; in the second to see whether they are improving; and in the third as a guide to vocational employment.

The survey shows that about two per cent of the children of the city have some form of heart defect, a percentage probably no larger than in other cities. Such children need especial care to increase their chances of outgrowing the trouble. Heart clinics are necessary to find these children by inspection (especially after recovery from "childish" diseases), to control their exercise and daily regimen, to advise them in regard to vocational study and work; and find and correct physical defects that hinder their recovery.

The whole report is extremely practical. It chases no rainbows but limits itself to recommendations that can be carried out under existing circumstances at moderate cost (largely by mere readjustments) and to some others that should be attended to a little later when more funds become available. Such a report is perhaps more easily made in Minneapolis than in some other cities, for the general system in the schools is found to be very good indeed.

New Tuberculosis Hospitals.—An outline of the construction plans for the tuberculosis hospitals so much needed for the treatment of ex-service men will soon be published by the U. S. Public Health Service; and it is earnestly hoped that funds for their construction will soon be available.

In the preparation of these plans, which are believed to embody the best principles of sanatorium construction collected from a multitude of sources, valuable assistance has been rendered by T. B. Kidner, of the National Tuberculosis headquarters. Mr. Kidner has been on duty with the Public Health Service for several weeks at a time, at intervals during the year; and the results of his study will be described and illustrated in the outline about to be issued. Copies of the publication may be had by application to the Surgeon General of the Public Health Service.

Deaths.—Dr. Harvey J. Cristman (A. M. C., '64), retired, died at his home in North Prospect, N. Y., from injuries received in a fall, on April 8, 1921.

—Dr. Frank E. Dean (A. M. C., '91), of South Shaftsbury, Vt., died March 23, 1921.

—Dr. Frank Gartner (A. M. C., '08), of New York City, died April 2, 1921.

—Dr. George Emerson (A. M. C., '73), of Winfield, Kansas, died April 10, 1921, from nephritis, aged 73.

In Memoriam

PETER LANGRAVE SUITS, M. D.

Born March 9, 1845; died April 21, 1921.

Carefully prepared statistics would probably show that quite a percentage of physicians, especially those engaged in general practice in the country, die as the results of accidents, caused by exposure, to night work, in all kinds of weather, and to the dangers that present, in these days, to the use of autos, conditions which have not been lessened, as Dr. Suits' case illustrates.

Dr. Suits was injured on January 19, 1921, when he sustained a fracture of the skull, caused by an automobile accident. His brother, Jacob Suits, who was with the Doctor at the time, was also quite badly hurt. Dr. Suits was taken to the Amsterdam Hospital, where he remained until his death, April 19, 1921.

The Doctor's career, as well as that of his brother, Dr. Josiah Suits, illustrates the possibility of educational advancement for any young man who is possessed of the energy and desire to acquire knowledge. In their early youth Union Free Schools were being established, and here they prepared themselves for higher educational advantages. The subject of this sketch entered and was graduated from Fairfield Seminary, after which he taught school for a period of ten years, in that part of Montgomery County where he was born, this being paralleled by his brother, Josiah, both sustaining the excellent reputation of being amongst the best teachers in the various schools where they were engaged.

In 1879, Dr. Suits graduated from the Albany Medical College, in the same year going to Tribes Hill, since which time he has been one of the prominent physicians in that section.

During his student days in Albany Dr. Peter Suits was an admirable, earnest worker, and always a credit to his instructors, at graduation standing among the highest in his class.

During all the years he has been in practice he has maintained an excellent record as a practitioner, as a loyal, patriotic citizen, and interested in all public affairs. His character was beyond reproach, and his sense of morality very keen. Although having reached the age when retirement was to succeed his faithful labors in the medical field, yet his life was shortened, and the sympathy of all goes out to his widow and relatives in their great loss. Dr. Suits will be missed among the members of his profession. It was always a pleasure to converse with him regarding the interesting cases he had seen, in his extensive country practice, and the skill with which he conducted his labors was greatly to be admired.

He was a member of the state and county medical societies, and was president of the Medical Society of Montgomery. He was also a member of the Holland Society of New York. Dr. Suits was a thirty-second degree Mason, a member of Artisan Lodge, No. 84, F. & A. M., Amsterdam Chapter, No. 81, R. A. M.; Albany Sovereign Consistory and Cypress Temple, Nobles of the Mystic Shrine of Albany. Dr. Suits was well known and respected, not only among the medical profession but also among the laity. His practice in the community was large, his constituency feeling confidence in his skill and judgment.

He is survived by his wife, two brothers, John Jacob and Willis Suits, of Fonda, two nephews and a niece.

The past year has taken many from the ranks of the old graduates of the Albany Medical College, but these are the changes that come in all walks in life.

A. V.

Current Medical Literature

NEUROLOGY.

On Decerebrate Rigidity in Man and the Occurrence of Tonic Fits. Kinnier Wilson. *Brain*, 1920, XLIII, 220.

This paper is a series of clinical observations showing the close analogy between the "cerebellar attitude and occasional tetanus-like seizures" of Hughlings Jackson and the "decerebrate rigidity" observed by Sherrington in animals. Sherrington's well-known observations after complete mesencephalic transection in animals, consist of tonic spasm of the forelimbs with retraction at the shoulder joint, straightened elbow, some flexion at the wrist, with palmar face of hand inward, hips extended, knee stiffly extended and ankle somewhat so. There is also slight opisthotonos with retraction of the head. Wilson reports five cases in man of similar decerebrate rigidity associated with tonic fits. Post-mortem examination in all these cases revealed the following causes: a vascular frontal glioma with hemorrhage into the ventricles, extensive ventricular hemorrhage (vascular syphilis), glioma of mesencephalon, ventriculitis (secondary to abscess), and basal tuberculous meningitis. All cases showed clinically the tonic extension-pronation of the arms, flexion of the wrist and extension of legs. Another case of decerebrate attitude with tonic fits is detailed; also two cases of his own and three from the literature of tonic fits with transient rigidity. Attention is also called to cases showing the decerebrate attitude in conscious life and certain incomplete or fragmentary cases. Especially interesting is one showing unilateral rigidity analogous to the experimental condition. Some cases of chorea or athetosis also show a partial decerebrate attitude. Many of the cases showed severe respiratory disturbances often preceding or accompanying the rigidity. In all the cases examined at necropsy it was noted that there was a practical transaction at the mesencephalic level by the pathological agent or its products. The level is physiological rather than anatomic. The respiratory difficulty noted is additional evidence that the functional lesion may be in the region of the red nucleus, Graham Brown has localized a respiratory tract at this level in the animals. Evidence is brought forward to maintain that the rigidity-producing influence lies near the red nucleus and not in the cerebellum.

This paper clearly demonstrates, by case histories and photographs, that a condition similar to the decerebrate rigidity noted in animals by Sherrington exists in man. The condition is associated with the disturbances in the red nucleus region. Many cases of a partial decerebrate attitude are observable in such diseases as chorea, athetosis, dystonia musculorum deformans and cases assumed to be cerebellar diseases.

HENRY VIETS.

On the Symptom-complexes of Lethargic Encephalitis with Special Reference to Involuntary Muscular Contractions.

WALSHE. *Brain*, 1920, XLIII 197.

Walshe calls attention to a number of interesting points he has observed about Lethargic Encephalitis. He divides the symptoms into two large groups of General and Nervous Systems, pointing out that the General Symptoms or signs of toxic infection are very inconstant, much more so, for instance, than in epidemic poliomyelitis. Using "positive" and "negative" symptoms in the sense in which Hughlings Jackson originally used them, he calls attention to the fact that in Lethargic Encephalitis the positive or irritative signs are much more diffuse and polymorphic than the negative or paralytic signs. Under positive nervous symptoms he classes delirium, mania, restlessness, etc., convulsions, involuntary movements and muscular contractions, ataxy, rigidity and pains; under negative symptoms, lethargy, coma, and paralyses. Where the virus produces negative symptoms it has shown a definite and characteristic selective action on the cells of the basal ganglia and on those of certain motor nerves in the brain-stem, producing the familiar basal ganglia and mid-brain types of the disease with its associated lethargy. On the other hand, in its irritating or exciting effect the virus appears to act equally on any and every part of the nervous system from cerebral hemispheres to spinal roots. He also suggests that we may be dealing with a complex virus in which more than one active component exists. Seven cases are reported and many references are made to the French literature.

HENRY VIETS.

Pathology of Gunshot Wounds to the Spinal Cord.

THORBURN. *British Journal of Surgery*, 1920, Vol. VIII, 202.

Sir William Thorburn has examined the wet specimens of injuries to the spinal cord in the remarkable war collection at the Royal College of Surgery, London. This paper is a series of descriptions of all the specimens, 21 in all, collected during the war at the Hunterian Museum, each of which is illustrated by colored drawings. From his study of this remarkable group he draws the following conclusions: (1) In all cases the injury is liable to present mechanical destruction and hemorrhage extending widely beyond the area of apparent injury, and affecting especially the grey matter of the anterior cornua, where it produces long spindle-shaped areas of destruction. (2) In the case of direct impact by foreign bodies, septic meningitis will generally ensue, but such meningitis is less common when impact is due only to fragments of displaced bone. It is generally absent in contusions of all forms, and the untorn dura mater is highly resistant to infection. (3) Meningitis tends strongly to extend upward rather than downward and is usually continuous, but may spread unobtrusively along the membranes, to blaze up at remote points. (4) Hemorrhage sufficient to cause serious compression is very rare, but it is usually present in such quantities that, should life be prolonged, it may readily give rise to well-defined cicatrices, which will tend to assume the annular and constricting type often found at operation.

HENRY VIETS.

Aphasia and Kindred Disorders of Speech.

HEAD. *Brain*, 1920, XLIII, 87.

This paper, covering seventy-five pages, is the Linacre Lecture for 1920. The method of study used was suggested to Dr. Head by his examination of the functions of the sensory cortex. (*Studies in Neurology*, Vol. II, p. 639.) He had found that serial tests of measured stimuli threw new light on cortical function. The *inconstant response* was one of the most striking results produced by a lesion of the cerebral cortex; sometimes a stimulus well above the normal threshold was appreciated and at other times evoked no reply. Because of this characteristic want of certainty, he thought it probable that disorders of speech due to cerebral injuries would reveal the same tendency. This is notoriously the case.

The paper consists of a very detailed account of the serial tests, a review of the previous explanations of aphasia, and his conclusions regarding the nature of the functions disturbed in aphasia and kindred disorders of speech.

His patients were mostly young men with cortical injuries due to war wounds. He found them much more satisfactory to examine than civilian patients because, their intellectual capacity was often not diminished, they were euphoric rather than depressed and their lesions were less severe and extensive (being cortical) than the deeper seated hemorrhages usually found in the aphasics of civilian life. Moreover, their symptoms tended to clear up to a considerable extent often leaving, however, certain aspects of speech permanently defective, a most valuable feature for his clinical studies.

Most of the tests used are not new in themselves, but the order of their presentation and certain ingenious variations make them distinctly an innovation in neurological research. For actual descriptions of the tests the reader must refer to the original article. It is sufficient here to note two of them. Two clock faces were prepared with adjustable hands. The patient places the hands of one clock in a similar position to that of the other one, set by the observer, or to oral or printed commands. The patient may also be asked to read the time or to write it on paper from the clock set by the observer. Another test consists of the imitation of movements of the arms by the patient with the observer sitting opposite him or with the patient facing a large mirror with the observer standing behind him.

In a chapter on the previous explanations of aphasia Head points out that while many authors have attempted to locate the distribution of the structural changes of aphasia few have examined the actual phenomena of disordered speech. Defects have been attributed to destruction of motor, auditory and visual images, to high-grade changes in the mechanism of articulation and to a lowering of general intellectual capacity.

Head believes that disorders in the use of language due to unilateral lesions of the brain, cannot be classed under the categories of speaking, reading and writing, for disorder of one of these " faculties " is accompanied by some analogous change in the others. Also, that such affections of language are not based on a destruction of " images " and that, furthermore, an anarthia or lowered intellectual capacity are not adequate explanations. His detailed arguments supporting this belief must, of course, be read in the original.

After a tabulation of the results of the serial tests, Head sets forth his views. His records show that patients succeed in reading and writing under certain conditions but fail completely if the task is presented in a different manner. This inconstant response is exactly the same as he observed in his studies of the function of the sensory cortex. A satisfactory hypothesis of aphasia must be capable of explaining this. He states that " all patients suffering from the disorders dealt with in this paper can choose from amongst a set of common shapes and colors the one which corresponds to that which they have been shown. If a simple geometrical figure or one of a series of objects in every day use be placed in his normal hand out of sight, the patient can indicate without hesitation the similar one from the group in front of him. He is able to set one clock in imitation of another without difficulty. He can, in fact, carry out any operation not demanding *symbolic formation.* All forms of immediate recognition are possible which do not require the intervention of some symbol; but all acts of symbolic thinking and expression are liable to be affected, more or less, in the cases of disordered language." He thinks, therefore, that the function affected in these pathological conditions might be called " symbolic thinking and expression."

Certain dissociated forms of symbolic thinking and expression were observed by Head. These forms are not new "types" of aphasia but simple partial or incomplete forms of symbolic thinking. One must be very careful not to consider them as "primary elements out of which speech has been evolved, but the forms assumed when the complete and highly developed function is broken up." In the first form, "Verbal Defects," patients are unable to produce at will and without effort the word required, although they can recognize it when it is offered to them either verbally or in print. Often writing shows analogous defects. These patients have great difficulty in imitating the movements of an observer facing them but carry out the test perfectly without hesitation when the movements are reflected in a mirror. Head thinks the crossed imitative movements are usually accompanied by internal verbalization of such words as "right" and "left." Patients of this group recognize their own errors. Another type is called "Nominal Defects." The patients can enunciate almost normally but there is a difficulty in naming an object without profound disturbance of pronunciation. This form of symbolic thinking comes out particularly clearly with the clock test described above. Patients know the time but cannot express it nominally and do not understand the nominal aspect or words, spoken or printed, in which they are told how to set the clock. The third group of "Syntactical Defects" can be distinguished by the fact that the patient talks jargon. The fourth type, "Semantic Defects," cause a loss of the comprehension of the significance of words and phrases as a whole. "This has usually been spoken of as an 'amnesia,' and the patient is said to have lost the memory of words; but there is no such thing as a 'faculty of memory' apart from the things remembered; a man who has lost 'memory for words' from a local and unilateral lesion of the brain is suffering from an affection of speech." Patients of this group are unable to recognize significance or to appreciate intention.

Various cases may show two or three of the types combined but isolated types are rare. In all cases mental acts which do not require a symbol between their initiation and their fulfillment are perfectly performed, while those demanding a symbol suffer. The "general intellectual capacity" is not disturbed but the mechanism by which certain aspects of mental activity are brought into play.

Head has attacked the problem of aphasia from a new angle; he is interested in the defect itself and not in speculation regarding its cause or localization in the brain. He has shown us that the defect is one of symbolic thinking and expression. With this definite conception of the loss of function much of the complexity is removed.

HENRY VIETS.

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MEDICAL ANNALS

Original Communications

SCHOOL MEDICAL INSPECTION IN NEW YORK STATE.

Read before the Medical Society of the County of Albany, 1921.

BY WILLIAM A. HOWE, B. S., M. D.,
State Medical Inspector of Schools; Special Lecturer, Albany Medical College; President American School Hygiene Association.

The Legislature of 1913 passed the first State-wide mandatory school medical inspection measure in this country. It was signed by the Governor and became a law on August 1, 1913. No funds were available for its enforcement during the first year. The Legislature of 1914 appropriated $5,000 with which to begin the enforcement of the law. The law does not apply to cities of the first class nor to private and parochial schools. It provides that every public school district in the State shall appoint a school medical inspector and compensate him for his services as such. It permits the employment of registered nurses as school nurses who shall aid the medical inspector. The services of the school nurse when so employed are accepted as part of the enforcement of the provisions of the law. Dentists, dental hygienists and other health experts are also employed under the provisions and interpretations of the statute.

The law provides that every pupil shall present a health certificate on admission to school each year, such certificate to be issued by a duly licensed physician after a careful physical examination made not more than 30 days prior to the issuance of the certificate. Parents are privileged to have the family physician make the examination and issue the health certificate. This is now being done to a far less extent than in the early enforcement of the law. Most of our pupils to-day are examined by the school medical inspector. Parents must be notified by the school authorities of physical defects found and are urged to give prompt and proper attention to the same. Parents are requested to report back to the school authorities when proper treatment has been furnished. Where parents are unable or unwilling to furnish the necessary relief for existing defects it is the duty of the school medical inspector to see that proper treatment is provided at the expense of the district.

Special provision is made for the examination of the eyes and ears of school children. The State Commissioner of Education is required to furnish to the school authorities suitable rules of instruction for such examinations and the necessary test cards, blanks, record books and other useful appliances for carrying out the purposes of the law in this respect.

The law provides further that where pupils have symptoms of any communicable disease they shall be excluded from school immediately and the health officer of the city or town notified of the existence of such disease. Pupils returning to school after such an illness must present a certificate from either the health officer or the school medical inspector. If issued by the family physician the return certificate must be countersigned by the health officer.

The enforcement of the law is placed in the hands of the Commissioner of Education who is authorized to adopt such rules and regulations as may be found necessary to carry into full force the purposes and intent of the law. The Commissioner of Education is required under the statute to appoint a competent physician who has been in the actual practise of his profession for a period of at least five years as State Medical Inspector of Schools. This was done from a Civil Service list in January, 1915. The State Medical Inspector of Schools began his duties on February 1, 1915. He is required under the supervision of the Commissioner of Education to perform such duties as may be necessary to carry out the provisions of the law.

Some of the Purposes of the Law.

1. To discover physical, dental, mental or other defects of school children and to secure their correction if possible.

2. To co-operate with school authorities to so teach practical hygiene to pupils that they may by its daily application to their lives escape many of the physical and mental defects so often acquired in school.

3. To examine teachers and to assist them to establish and to maintain a high standard of physical fitness.

4. To co-operate

a. In the training of teachers and prospective teachers in the fundamental essentials of practical hygiene.

b. In the training of teachers to recognize mental and physical defects and how to deal successfully with them.

5. To co-operate with health authorities in the recognition and suppression of communicable diseases among school children and in the maintenance of high standards of sanitation in school buildings and on school premises.

6. To co-operate with all agencies interested in health and sanitation in schools and to utilize such agencies in such manner that the best results may be accomplished.

7. To bring the school and the home into closer and more co-operative relation with each other to the end that good health may be popularized in both and many of the physical defects so common among school children be prevented or corrected.

8. To systematize, standardize and stimulate school medical inspection in its general interpretation that the best results may be accomplished in the enforcement of the purposes of its various provisions.

9. To acquaint the medical, dental, nursing and other professions with the real purposes of school medical inspection and to enlist their co-operation and guidance to the end that proper preventive and corrective assistance may be given to teachers and to pupils in our health service in schools.

Organization for Administration of the Work.

Our present staff in the Department with which to carry on this work in schools is as follows:

State Medical Inspector of Schools.
Assistant State Medical Inspector of Schools (Man).
Assistant State Medical Inspector of Schools (Woman).
State Supervising Nurse.
State Supervisor of Nutrition.
State Oral Hygiene Inspector.
Instructor in Hygiene.

Closely associated with this staff and working in active cooperation with us is the State Mental Diagnostician with one assistant psychologist and an expert to organize special classes for retarded children.

Field Organization.

School Medical Inspectors.

There are at present approximately 1,200 school medical inspectors employed in the State. Full time school medical inspectors are employed in Albany, Amsterdam, Lockport and Poughkeepsie. In several second class cities six part time school medical inspectors are employed. The salary paid is based upon time devoted to the service. In most of the smaller cities the school medical inspector is employed for ten months or during the school year. In the rural communities the examining physician receives from fifty cents to one dollar and twenty-five cents for each examination.

School Nurses.

About 250 school nurses are devoting their full time to health work in schools. This is two and one-half times as many as were engaged in the work in 1915. Only nurses registered in New York State are eligible to become school nurses. In most instances they are employed for the school year. They are paid from $1,000 to $1,800 per year. The State Board of Regents recently established certain educational and experience qualifications, by which a registered nurse may become a health teacher. When so qualified the district employing her is entitled to the regular State quota for a grade teacher. It is expected that the well trained nurse will become more and more of a factor in the health educational program in our schools.

School Dentists.

School dentists are employed in forty-two cities and villages in the State exclusive of cities of the first class. These are all on part time. There is no city in the State of 30,000 population in which there is not a dental dispensary conducted by either the city or the school authorities. With two exceptions these dental dispensaries are all conducted by the school authorities.

In five or six cities in the State dental hygienists are being employed. These young women, trained in mouth hygiene, clean the teeth of the children, once or twice each year, chart dental defects found and instruct the pupils in dental cleanliness. This phase of our work is growing rapidly in favor and will in time prove of material assistance in dealing with the great problem of dental health.

Supervisor of Nutrition.

A full time school supervisor of nutrition is employed in several of our cities. In most cases the salary of this health expert is paid by outside agencies.

Our work in nutrition has grown more rapidly than any other during the past two years. There are only seven cities in the State in which scales are not being used to weigh children, while in twenty-eight cities the undernourished child is given special attention to nutrition. Scales have been provided in all but eleven of the villages of the State under superintendents, while sixteen villages are providing milk and food for undernourished children. In Erie county more than one-half of the rural schools have been furnished with scales. In many of these schools in this county provision has also been made for stoves for hot lunches. Where careful surveys have been made twenty per cent. of our school children have been found to be ten per cent. or more underweight.

Bulletins, Forms and Directions

In the administration of the work thirty different forms and bulletins have been prepared and are in use. Most of these are in general use throughout the State while others are used in special cases. The department will be pleased to mail to any person interested in these forms a complete set on request.

Results Accomplished During the Past Four Years.

During the past four years our school medical inspectors and other physicians of the State have made 1,752,735 physical examinations. Of these 896,907 were made in cities and 855,828 in rural schools. Seventy-three and seven-tenths per cent. of the registered pupils were examined in cities while seventy-nine and three-tenths per cent. of the pupils registered were examined in rural schools. Five and six-tenths per cent. more of the pupils registered in the rural schools were examined than those in the city schools. The total number of defects reported was 1,393,888. These were reported as follows:

From cities	645,663
From rural schools	748,225

The ratio of frequency of defects found to the number of examinations made was as follows:

In cities	.72
In rural schools	.87

The total number of corrections reported during the past four years was 410,160. These were reported as follows:

From cities	239,367
From rural schools	170,813

Thirty-six and six-tenths per cent. of all defects reported in the cities were treated. Twenty-two and seven-tenths per cent. of all defects reported in rural schools were treated. Thirteen and nine-tenths per cent. more corrections were obtained in cities than in country districts. These results in corrective work have been made possible by the generous co-operation of hundreds of the best men and women in the medical and dental professions in the State, by special opportunities extended to deserving cases by hospitals and dispensaries in many localities, by a splendid spirit of co-operation by other State departments, and by many agencies interested in the betterment of the health and physical fitness of school children. An analysis of some of these results, with brief comments, might be of interest.

Defective Vision.

Total number of children found with defective vision	141,574
Total number of children treated for defective vision	54,461
Total number of children with defective vision still needing attention	87,113
Percentage of children with defective vision treated	38.2
Percentage of children with defective vision not treated	61.8

Many of these children are seriously handicapped in their school work. Some had been placed in classes for retarded children. A child who does not see normally can not be expected to do normal work in school. Many of the neuroses or nervous conditions found among school children are due to abnormal conditions of the eyes.

Defective Hearing.

Total number of children found with defective hearing	29,216
Total number of children treated for defective hearing	7,180
Total number of children with defective hearing still needing attention	22,036
Percentage of cases treated	24.5%
Percentage of cases not treated	75.5%

Deafness is generally acquired and not inherited. It is most often due to conditions which if recognized early and properly treated, could be easily remedied. It is often insidious in its incipiency and progressive in its course. Our institutions for the deaf are filled to-day with children who first lost their hearing and then their speech. Hundreds of our children with partial deafness to-day will be totally deaf in adult life unless they receive proper corrective treatment.

Defective Nasal Breathing.

Total number of children reported with defective nasal breathing.	119,174
Total number of children with defective nasal breathing treated..	30,644
Total number of children with defective nasal breathing not treated	98,530
Percentage of children with defective nasal breathing treated....	12.2
Percentage of children with defective nasal breathing not treated.	87.8

This condition is due in most cases as you know to an excessive growth of adenoidal tissue. Greatly enlarged tonsils are often a contributing factor. With this condition as with most physical defects early recognition and proper treatment are essential for successful control.

Hypertrophied or Diseased Tonsils.

Total number of children reported with hypertrophied or diseased tonsils	309,510
Total number of cases of hypertrophied or diseased tonsils treated.	38,779
Total number of cases of hypertrophied or diseased tonsils not treated	270,731
Percentage of cases of hypertrophied or diseased tonsils treated.	12.4
Percentage of cases of hypertrophied or diseased tonsils not treated	87.6

Comparatively little is being done to deal successfully with the above four conditions that contribute so materially and so frequently to physical defects among school children. The eyes and ears, nose and throat form a region in which many of the most serious physical defects are found and for which far more could and should be done. The medical and educational authorities should be stimulated along these lines.

Defective Teeth.

Total number of dental defects reported	558,602
Total number of dental defects treated	180,636
Total number of dental defects not treated	377,726
Percentage of dental defects treated	31.7
Percentage of dental defects not treated	68.3

Dental conditions are responsible for much ill health and retardation in school. They are the most frequent physical defects found among school children. They are among our most difficult problems in school health service. To deal with them successfully will require systematic instruction in mouth hygiene in our schools. With these as with most of the physical defects found among school children our greatest opportunity is found in prevention rather than in correction.

DEFECTIVE HEART.

Total number of children reported with defective heart..........	18,629
Total number of children treated for defective heart............	4,984
Total number of children not treated for defective heart........	13,465
Percentage of cases with defective heart treated...........	26.4
Percentage of cases with defective heart not treated.......	73.6

Abnormal heart conditions both organic and functional are increasing rapidly. We are told by heart experts that one and six-tenths per cent. of our school children are suffering with either organic or functional heart trouble. This condition is said to be increasing more rapidly to-day than is tuberculosis. It is highly important that our school health service should be so organized and administered as to stimulate closer and better diagnostic attention and care to incipient heart conditions.

PULMONARY CONDITIONS.

Total number of children reported with defective lungs.........	6,756
Total number of children with defective lungs treated...........	2,903
Total number of children with defective lungs not treated.......	3,853
Percentage of children with defective lungs treated.............	43.4
Percentage of children with defective lungs not treated.........	56.6

This feature of our school health service is receiving very inadequate attention. Of the thousands of school children who are to-day suffering with tubercular infection comparatively few are being recognized. Of these less than one-half are receiving any attention. Experts on tuberculosis tell us that seventy-five per cent. of children become infected with the disease before the age of 15. Fortunately in most of these cases the infection is dormant though viable. Activity is often aroused by the acute exanthemata to which all children are liable, by any illness lowering their power of resistance to infection, by malnutrition, by insanitary conditions at school and at home and by various other causes. Tuberculosis I believe will never be controlled nor satisfactorily reduced until we are able to recognize the disease in its incipiency or preincipiency and to so invigorate the resistance of the child as to prevent germ activity or to destroy infection.

DEFECTIVE NUTRITION.

Total number of pupils reported with defective nutrition	52,996
Total number of pupils with defective nutrition treated	17,788
Total number of pupils with defective nutrition not treated	35,108
Percentage of cases with defective nutrition treated	32.3
Percentage of cases with defective nutrition not treated	67.7

These figures do not begin to indicate the extent of malnutrition among school children. Several careful surveys made during the past year indicate that practically twenty per cent. of all school children are ten per cent. or more underweight. The basic necessity of proper normal mental and physical growth of children is proper nutrition. It is absolutely impossible to deal successfully with the various phases of our health service unless proper attention is given to the nutrition of the growing child. Our Division of Nutrition of School Children has a definite plan with which to deal with this vital part of our health work.

NERVOUS SYSTEM.

Total number of pupils reported with defects of nervous system	13,468
Total number of pupils treated for defects of nervous system	5,035
Total number of defects of nervous system not treated	8,433
Percentage of pupils with defects of nervous system treated	37.2
Percentage of pupils with defects of nervous system not treated	62.8

These figures do not indicate the real extent of the prevalence of disturbances of the nervous system among school children. When our Division of Mental Hygiene becomes more efficient we will be able to determine more accurately the mental fitness of our children, the various causes contributing to mental retardation and the best means of preventing and otherwise dealing with the same.

ORTHOPEDIC CONDITIONS.

Total number of pupils reported with postural conditions	14,646
Total number of pupils with postural conditions treated	6,637
Total number of pupils with postural conditions not treated	8,009
Percentage of cases with postural conditions treated	44.7
Percentage of cases with postural conditions not treated	55.3

Reports under this section include children who were victims of the last two epidemics of infantile paralysis, others with spinal curvatures, congenital and acquired orthopedic conditions. We hope in time to give far better attention to the aftercare of these cases by correlating more closely the services of our school medical inspectors and our directors of physical education. Much I believe can and should be done along these lines in the future.

OTHER PHYSICAL DEFECTS.

Total number of pupils reported with other physical defects	90,267
Total number of pupils with other physical defects treated	26,264
Total number of pupils with other physical defects not treated	64,003
Percentage of pupils with other physical defects treated	30.1
Percentage of pupils with other physical defects not treated	69.9

In this group are included a wide range of physical defects not classified in the above tabulations. Speech defect is found in many of these cases. Experts tell us that over four and five-tenths per cent. of our school children suffer with one form or another of speech defect. This feature of our work offers much encouragement along both corrective and preventive lines.

HYDROCHLORIC ACID.

The President's Address to the Medical Society of the County of Albany, May 17, 1921.

By THOMAS W. JENKINS, M. D.

Hydrochloric acid is a gaseous compound of hydrogen and chlorine. Its solution in water is the article we are familiar with and used in the arts and pharmacy. It has been known as spiritus salis because of its production from common salt, it was also known as marine acid air, hence its synonym muriatic acid. It may be prepared quite pure by decomposing sodium chloride with sulphuric acid and conducting the gas into water.

The crude acid of commerce is often obtained as a by-product in the manufacture of sodium or potassium sulphates from their respective chlorides, the reactions possibly occur in two distinct steps.

$NaCl$ and H_2SO_4 become HCl and $NaHSO_4$ then $NaCl$ and $NaHSO_4$ become HCl and $NaSSO_4$.

The crude acid is known as muriatic acid and is often a deep yellow color owing to organic matter and traces of iron in solution. This should not be used therapeutically. The official hydrochloric acid should be free from all impurities except a trace of non-volatile substances. It should be free from arsenic which is derived from the sulphuric acid. It has a specific gravity of 1.163 at fifteen degree centigrade and should contain 31.89 per cent. by weight of absolute hydrochloric acid, which is determined by normal potassium hydroxide.

The pharmacopoeia directs that the use of 3.64 grams for the assay which at 31.89 per cent. should contain 1.1608 grams of hydrochloric acid. Since each cc. of normal potassium hydroxide solution corresponds to .0346 grams of hydrochloric acid. The 3.64 grams of the acid will require 31.9 cc. of normal potassium hydroxide solution for complete neutralization, for 1.698 divided by .0364 yields 31.98. Strong hydrochloric acid causes fumes when exposed to the air due to the moisture in the air and if ammonia be present white fumes of ammonium chloride will be formed. Dilute hydrochloric acid is made from the official acid by mixing with water. Ten parts of the former with 21.9 parts of the latter by weight. Or 100 grams of the acid to 219 grams of distilled water. This must contain 10 per cent. of absolute hydrochloric acid. For 100 grams of the official acid contains 31.89 grams of hydrochloric acid., And 31.89 are equal to 10 per cent. of 319 grams.

Diluted acid has a specific gravity of 1.050 at 15 degrees centigrade and corresponds in all its properties, reactions and tests to the official acid, except that it is odorless and no fumes are formed when exposed to the air and that 3.64 grams require only 10 cc. of normal potassium hydroxide for neutralization. Methyl orange is the indicator. Hydrochloric acid when heated with manganese dioxide it evolves chlorine, this being the way that Scheele discovered chlorine. On distilling it with normal barometric pressure, a stronger acid passes over first until at 110 degrees centigrade anacid of about 20 per cent remains which distills unchanged. With silver nitrate it yields a white curdy precipitate, insoluble in nitric acid but readily soluble in ammonia water. It should be free from iodine, bromine, arsenic, sulphuric and sulphurous acids and sulphates and contain no free chlorine.

The ancients were already acquainted with the cementation of argentiferous gold by heating it with common salt or copperas in which case hydrochloric acid is set free and comes into action. To the Arabian alchemists aqua regia was well known (aqua regia being a mixture of nitric and hydrochloric acids). Pure aqueous hydrochloric acid is first mentioned by Basilius Valentinous in the fifteenth century. Late in the sixteenth century Libavious mentions its liberation when heating salt with clay. Glauber, in 1648, calls it the dearest of acids and most difficult to prepare. He discovered the method of preparing it with salt and oil of vitriol and kept it secret; he also knew of hydrochloric acid gas, but Priestly first described this gas and its properties in 1772 after collecting it over mercury. Hydrochloric acid is sometimes found in nature in the exhalations of volcanoes and in aqueous solutions in springs and brooks and in rivers draining volcanic areas. In the animal body it is mostly present because the stomachic glands secrete it. In the gastric secretion of dogs about three-tenths per cent. is present and in the salivary glands of some snails (Dolium Galea) also about four-tenths per cent. is found along with some free sulphuric acid. Hydrochloric acid is formed synthetically from its elements if mixed in equal proportions and exposed to sunlight, an explosion occurs.

Anhydrous hydrogen chloride is a colorless gas consisting of equal volumes of hydrogen and chlorine, by weight 2.74 per cent. of the former to 97.26 per cent. of the latter. It has a great affinity for water and condenses with the vapor of atmospheric air into thick fumes.

Water absorbs it with evolution of heat. Salts containing water of crystallization absorb it from gaseous mixtures. Aqueous hydrochloric acid exposed to sunlight in a closed bottle gives off free chlorine.

One volume of water at 0° centigrade and 750 mm. pressure absorbs 525.2 volumes of hydrochloric acid gas giving a specific gravity of 1.2257, and 45.148 per cent. of gas. The solubility of hydrochloric acid is at certain temperatures inversely proportionate to the atmospheric pressure. One litre of water at zero and 100 mm. pressure absorbs .657 grams of gas at 1000 mm. pressure, .856 grams of gas. At 760 mm. pressure and zero centigrade .825 grams of gas at 60 centigrade, .561 grams of gas.

On boiling aqueous solutions of hydrochloric acid it loses either gas or water until its specific gravity is 1.101 and its composition is then R? HCl_2O .17, Water 79.82, which exactly corresponds to the formula HCl plus H_2O 8, and then boils at 110. The stronger acid gradually loses gas until it reaches the specific gravity of 1.128 at 15 degrees centigrade, corresponding to the formula of HCl 1 H_2O 6 and boils at 106 with a further loss of gas. On passing a stream of air through aqueous hydrochloric acid part of the latter is evaporated. For each certain temperature an acid of a definite composition is left behind which then evaporates unchanged, until that point has been reached which corresponds to the temperature in question, temperature zero, HCl 25 per cent., temperature, 100 HCl 20.7 per cent. Hydrochloric acid is a very strong acid and reddens blue litmus paper in weak dilutions and has a strongly acid taste. It dissolves most metallic oxides forming chlorides, and also many metals with the evolution of hydrogen. Lead is also quickly corroded by somewhat concentrated and hot solutions. Lead scarcely being attacked by dilute sulphuric acid.

Of great importance is the action exerted by hydrochloric acid on compounds rich in oxygen, as peroxidase of manganese, chromic acid and its salts, nitric acid, etc. As upon this property is founded the industrial preparation of chlorine and its products and also the action of aqua regia (a mixture of nitric and hydrochloric acid) hydrochloric acid in hygiene has been studied by Lehman (*Arch. Hygiene*, 1888). Even with only .01 per cent. in air irritation was produced, with .1 to 0.15 per cent. Animals died in a few hours. A strong man found air with .004 per cent.

unbearable. In no case should a factory contain more than .01 per cent. An antiseptic action of hydrochloric acid is shown in solution as low as 0.5 per cent.

The strength of hydrochloric acid in aqueous solutions is approximately the product of 200 and the decimals of its specific gravity, S. G. 1.15. .15 x 200 equals 30 per cent.

Toxicology. A few drops entering the larynx may prove fatal.

Rapidly swallowing one dram may cause death.

Duration of life is from two to twenty-four hours. Antidote, calcined magnesia in milk.

Pathology. The same as most acids, eschars and erosions; the eschars are either colorless or white. The stain on cloth is red.

Tests. A rod moistened with ammonia water held near mouth of bottle gives white clouds of ammonium chloride.

Muriatic acid is sold to some extent, but nothing like the quantities of sulphuric acid, as its carriage is impossible in metallic vessels and therefore more troublesome and expensive. Most of it is converted into bleaching powder or chlorate of potash and other products.

Hydrochloric acid occurs in the gastric juice in quantities of from .46 to .58 per cent., chlorine 0.49 to 0.62 per cent. The action of gastric juice is due partly to the acid, partly to the combined action of acid and ferment. Dog's juice contains 0.6 per cent, human juice, 0.2 per cent. By the action of the hydrochloric acid certain changes take place in the food stuffs. Cane sugar is inverted into glucose and fructose, a certain amount of hydrolysis takes place in the dextrins and maltose produced by the salivary juice on starches, fibrin is swollen up, caseinogen of milk is precipitated, collegen of connective tissue is swollen up. It also causes the first step in the hydrolysis of fats. The chief digestive ferment of the stomach is pepsin but pepsin is dependent on acids, of which hydrochloric acid is the best. That the acid of the gastric juice is a mineral acid and present in considerable quantities has excited much interest and discussion. It was first shown by Schmidt. Attempts have been made to ascertain the histologic elements concerned in its secretion and the nature of its chemical reaction. It is pretty well decided that the parietal cells of the gastric mucosa tubules are responsible for its secretion and the chemistry as follows: the reaction between the sodium chloride and the acid sodium phosphate of the blood,—NaH_2PO_4 plus NaCl becomes Na_2HPO_4 and HCl.

In support of this general statement it has been shown that if sodium chloride be reduced in the blood by removing it from the foods for a sufficient time the gastric secretion will not contain hydrochloric acid. On the other hand if sodium bromide or iodide be added to the food hydrobromic or hydriodic acids can be found in the gastric juice. However the exact steps cannot be proved.

Von Furth's Chemistry, page 9, says it is entirely reasonable to regard the sodium chloride of the ingested food as the source of the gastric hydrochloric acid. Roseman, quoted in the same book, states that it is practically impossible to produce any important reduction of the chlorine content of the body because the system is able to protect itself against chlorine starvation by lowering the excretion of chlorine in the urine to a minimum. Apparently only about one-fifth of the chlorine content of the body can be discharged in the gastric juice. The same worker says that if free hydrochloric acid is to be derived from sodium chloride the latter must react with water in conformity with the following formula:

NaCl plus H_2O becomes HCl plus NaHO.

For each molecule of hydrochloric acid thus separated a molecule of sodium hydroxide remains in the organism, and he uses this theory to explain that during the height of the secretion of the acid the sodium chloride elimination in the urine is diminished and why in the ensuing period of resorption of the acid contents of the stomach more ammonia fails to be synthesized into urea, it being utilized to neutralize the free acid, and also to the fact that when sodium chloride is administered to a starved animal it increases the alkalinity of the urine.

Physiochemical explanations of the phenomena dwell on the ion theory. If it be conceived that an organic acid be produced in the gastric mucosa (Forlactic acid is formed by the cells of the body freely as I have drawn attention to in an article on acidoses written some time ago) the organic radicle will under the stimulus of the parietal cells of the gastric tubules react with sodium chloride by diffusion.

But then it would be necessary to explain how a weaker acid can drive out a stronger, and here it might be well to remind you that snails secrete even a stronger acid, namely sulphuric acid.

The Mechanism of Pancreatic Secretion.

The pancreatic juice does not flow continuously into the small intestine; the secretion begins about an hour after food enters the stomach and attains its maximum rate in from two to four hours. It flows intermittently until digestion is complete. There is no flow while fasting. The stimulus that excites the pancreas to pour out its secretion is known to be the presence of the acid chyme in the duodenum. (Dolinsky in Pavlow's laboratory, 1896.)

Dilute acids such as hydrochloric acid injected into the duodenum will excite the flow at any time. Until recently this was supposed to be a simple nervous reflex. Such however is not the case, since pancreatic secretion can take place after all nerves to the intestine have been cut. The stimulation is entirely chemical; what happens is the acid acts on a substance in the mucous membrane of the small intestine termed prosecretin and converts it into secretin which is absorbed into the blood vessels and carried in the blood stream to the pancreas where it excites the cells lining the tubules to action. This substance secretin can be prepared artificially as follows: scrape the mucous membrane from the duodenum of a dog, mix with 200 cc. of a 0.4 per cent. hydrochloric acid solution, allow it to stand for a few hours then neutralize and boil and filter. A small quantity of this filtrate injected into a vein will cause a flow of pancreatic juice in about twenty seconds. Secretin and its action on the pancreas were discovered by Baylis and Starling (1906) and belongs to a group of internal secretions to which Starling gave the name of hormones and they may be defined as chemical substances produced in one part of the body and carried in the blood stream to some other part of the body which it excites to action. Chemically they are comparatively simple substances of low molecular weight and heat, stable, in contradistinction to ferments; they are not antigens but are rapidly oxidized and rendered inert after they have accomplished their purpose. They are destroyed by metallic salts. They play an important part in the body taking the place of the nervous system when there is no great necessity for speed. It is interesting to note that the salivary glands are activated by nervous stimulation entirely, the stomach by nervous and partly by chemical stimulation (Gastrin). Pancreas is activated by chemical stimulation alone. As is well known when the chordi tympani nerve is stimulated the salivary gland secretes saliva and during that time and just before the amount of blood passing through the salivary gland is enormously increased (from 4 to 8 times). Under the stimulus of the hormone secretin the amount of blood passing through the pancreas is likewise markedly increased, thereby giving an opportunity to the islands of Langerhans to contribute their modicum of internal secretion to the blood stream, and unless the islands of Langerhans are entirely exhausted the greater the blood supply the greater the opportunity.

Hydrochloric Acid in Therapy.

Dilute acids excite a reflex flow of saliva. In the stomach they promote gastric secretion and, secondly, by their influence in the production of secretin, promote the flow of pancreatic juice and also the flow of bile (Bastedo). Hydrochloric acid is used when the normal acid of the gastric juice is deficient. Meat and meat extracts stimulate the secretion of hydrochloric acid. Practically all the functional diseases of the stomach in the final analysis resolve themselves into the degree of hydrochloric acid present, ranging from an achloahydria to a hyperchlorhydria. The same thing maintains even in organic disease, ranging from cancer to peptic ulcer. In hepatic insufficiency it is the best remedy we have except the bile salts themselves, and is of use in all degrees from catarrhal jaundice to biliary colic. In these conditions the strong acid is used, three drops in a wineglass of water after meals. If jaundice persists after a week of such treatment you may feel assured that some condition other than a simple one exists.

In pancreatic deficiency it is the best remedy we have except the pancreatic ferments themselves and is of service in conditions ranging from steatorrhoea to diabetes and in diabetes the ferments themselves are of no use. In continued fevers the secretion of gastric juice is greatly diminished or absent. In my student days we were taught that as the tongue appears so is the rest of the digestive tract. So when you have the dry, hard and thick tongue appearing the chances are that the dry, hard and thick stomach wall is not secreting. Water of course is essential and is good, hydrochloric acid added is better. Even in rheumatic conditions where a focus of infection cannot be found it would be well to try the acid on the presumption that the focus of infection may be along the digestive tract or gall bladder, for the acid is the best intestinal antiseptic.

In 1908, shortly after becoming familiar with Baylis' and Starling's writings on the hormone effect of hydrochloric acid on the pancreatic secretion and bearing in mind the relation between the islands of Langerhans and diabetes, I tried the effect of the acid and in the first case it was administered it was effectual in causing the sugar to disappear from the urine. The urine was examined at the Bender Laboratory and contained seven per cent. of sugar. This patient is still alive and takes the acid from time to time and is comfortable. It has been effectual in many cases since, most of the patients being on a full diet, some refraining only from pure sugars. I have not considered degrees of glycosuria, the sugar being present or absent. In some instances the symptoms, such as pruritus or thirst, would disappear before the urine would be sugar free.

Realizing that diabetes or glycosuria, whichever you wish to speak of, may be due to cerebral apoplexy, syphilis, arteriosclerosis, hepatic cirrhosis, pancreatic deficiency or even Gaucher's disease, it is absurd to think of a specific or any one way or method of treating diabetes. But I am convinced that hydrochloric acid has a place therein.

Summary of the effect of hydrochloric acid on the digestion and metabolism of carbohydrates:

(1) Stimulation of the salivary glands to secrete saliva.

(2) Inversion of saccharose to glucose and fructose.

(3) Hydrolysis of the dextrins and maltose, products of salivary digestion.

(4) Activation of pancreas through prosecretin and secretin.

(5) Increasing the quantity of blood passing near islands of Langerhans, enabling a greater production of their internal secretion.

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Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.
BUREAU OF VITAL STATISTICS.
COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.

DEATHS FOR THE MONTH OF APRIL, 1921.

Tuberculosis	19	Bright's Disease	13
Typhoid Fever	1	Apoplexy	12
Diphtheria	1	Cancer	11
Scarlet Fever	1	Accidents and Violence	10
Whooping Cough	0	Deaths under one year	15
Measles	1	Deaths over 70	44
Diarrheal Diseases	2	Death rate (non-residents included)	17.35
Pneumonia	3		
Broncho Pneumonia	5	Death rate (non-residents excluded)	13.97
Influenza	0		
Grippe	0		

Deaths in Institutions.

	Non-Res.	Res.
Albany Hospital	13	10
Albany Hospital T. S.	1	3
Albany County Hospital	0	2
St. Peter's	4	6
Homeopathic Hospital	1	3
Hospital for Incurables	1	1
Brady Maternity Home	0	4
St. Margaret's Home	1	1
Child's Hospital	1	1

	Non-Res.	Res.
Convent Sacred Heart, Kenwood	0	1
Home for the Aged	2	2
Public places	1	4
	25	38

Births	214
Still Births	6

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	2	Tuberculosis	27
Scarlet Fever	11	Mumps	0
Diphtheria and Croup	17	Pneumonia	26
Chickenpox	55	Influenza	10
Smallpox	0	Septic Sore Throat	1
Measles	193	Puerperal Septicaemia	1
German Measles	0		
Whooping-cough	31	Total	374

Number of days quarantine for scarlet fever:

Longest	54	Shortest	30

Number of days quarantine for diphtheria:

Longest	18	Shortest	12

Fumigations:
94 rooms in 31 buildings.

Milk bottles disinfected	1,179

Communicable Diseases in Relation to Schools.

	Reported		
	D.	S.F.	M.
Public School No. 1	1	..	3
Public School No. 3	..	..	9
Public School No. 4	..	..	5
Public School No. 8	..	..	3
Public School No. 10	..	..	1
Public School No. 12	1	..	1
Public School No. 14	..	..	2
Public School No. 15	..	..	2
Public School No. 16	..	..	6
Public School No. 17	..	1	3
Public School No. 18	1	2	..
Public School No. 19	..	1	8
Public School No. 20	1	1	4
Public School No. 21	..	..	3
Public School No. 22	..	..	1
Public School No. 24	..	1	1
St. John's School	1	..	..
Albany Boys' Academy	..	..	2
St. Joseph's Academy	2	..	..
St. Ann's School	1	1	2

MISCELLANEOUS.

Cards posted for communicable disease	169	Vaccination dressings	64
Cards removed	155	Children examined for employment certificates	8
Notices served on schools	317	Number of employment certificates issued	8
Notices served on stores and factories	18	Taking specimens of blood for Wassermanns	0
Postal card returns sent to doctors	169	Taking smears for Gonococci	0
Postal card returns received from doctors	155	Cultures	10
Inspections and reinspections	196	Postal cards sent to milk dealers	55
Vaccinations	82	Inspections, midwives	7

Tuberculosis.

Living cases on record April 1, 1921		576
Cases reported:		
By card	19	
Dead cases by certificate	8	27
		603
Dead cases previously reported	11	
Dead cases not previously reported	8	
Removed	20	
Died out of town	0	
Recovered	0	
Unaccounted for	0	39
Living cases on record May 1, 1921		564
Total tuberculosis death certificates		19
Non-resident deaths:		
Albany Hospital Camp	1	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	0	
City at large	0	1
Resident deaths		18
Visits to cases of tuberculosis		175
Miscellaneous visits		24
Visits to physicians		13

LABORATORY REPORT.

Diphtheria.

Initial Positive	30	Release Negative	113
Initial Negative	164	Unsatisfactory	11
Release Positive	36		
		Total	354

Sputum for Tuberculosis.

Positive	24	Negative	165
		Total	189

Widals.

Positive	2	Unsatisfactory	5
Negative	28		
		Total	35

Meningococcus.

Positive	0	Negative	0
		Total	0
Wassermann tests	367	Gonorrhoea Examinations	120
(Positive 59)		(Positive 25)	
Milk Analyses	173	Miscellaneous Examinations	3
Water Analyses	0		
Pathological Examinations	0	Total examinations	1,241

HEALTH PHYSICIANS' REPORT.

Cases assigned	58	Calls made	113

DIVISION OF SANITATION.

Complaints		179	Garbage collected from 1st District bbls	325
Inspections		87		
Plumbing	9		Garbage collected from 2nd District bbls.	195
Sanitary	78			
Reinspections		84	Garbage collected from 3rd District bbls.	390
Plumbing	4			
Sanitary	80			

HEARINGS.

Hearings	1	Cases heard	1

Class of Cases.

Chickens	1

Disposition of Cases.

Reinspection	1

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections		108	Houses tested		12
Old Houses	54		Smoke	0	
New Houses	54		Blue or red	0	
Permits issued		45	Peppermint	0	
Plumbing	42		Water test	12	
Building	3		Houses examined		20
Plans submitted		15	Re-examined		40
Old buildings	3		Valid	9	
New buildings	12		Without cause	11	
			Violations		0

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	13	Cats removed	43
Dogs removed	18		
		Total	74
Eggs removed ....cases	3		

DIVISION OF MARKETS AND MILK.

Public market inspections	24	Milk cans condemned	0
Market inspections	120	Lactometer readings	178
Fish market inspections	10	Temperature readings	178
Fish peddler inspections	0	Fat tests	21
Slaughter house inspections	2	Sediment tests	0
Rendering establishment inspections	0	Chemical tests	0
		Cows examined	162
Pork packing house inspections	5	Cows quarantined	1
		Cows removed	1
Hide house inspections	0	Complaints investigated	2
Milk depots inspected	44	Milk houses inspected	28
Stores inspected	34	Storekeepers permits issued	251
Dairies inspected	28	Milk dealers permits issued	42
Milk cans inspected	230		

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR MARCH, 1921.—Number of new cases, 189; classified economically: Free, 59; bed cases, 12; prenatal, 5; dispensary soc. service, 0; tuberculosis (pos.), 12; tuberculosis super., 12; hospital social service, 0; venereal social, 16; readmitted, 14. Paid, 130; limited means, bed cases, 71; metropolitan, bed cases, 36; metropolitan prenatal, 20; industrial bed cases, 0; industrial social cases, 3; Western Union, 0. Cases carried over from last month, 574; bed cases, 105; prenatal cases, 38; dispensary social service, 0; tuberculosis (total), 346; hospital social service, 0; venereal, 85; industrial, 0; Western Union, 0. Classification of bed cases: Medical, 77; surgical, 5; obstetrical, 31; prenatal, 25; confinements, 30; maternity, 1; miscarriages, 0; number of babies born, 31.

Visits for Nurses (all departments).—1,787; for bed care, 1,214; prenatal instruction, 64; tuberculosis (sup. and inst.), 64; venereal dis. instr., 71; hospital social serv., 0; general soc. service, 87; for other purposes, 192; dispensary social, 2; supervision, 93.

Source of Nursing Cases.—Metro. agts., 40; doctors, 67; nurses, 13; dispensary, 3; family or friends, 21; other sources, 13.

Disposition of Bed Cases.—Discharged recovered, 64; discharged improved, 25; unimproved, 16; dead, 5; to other care, 27; carried, 141. Disposition of other cases: Prenatal—Discharged to maternity care, 31; to hospital, 10; to other care, 9; carried, 47. Dispensary social service—Dis. dispensary care, 0; carried, 0. Hospital social service—Discharged home, 0; dead, 0; to dispensary, 0; to Pavilion "F," 0; lost, 0; carried, 0. Venereal—Discharged cured, 8; temporarily, 13; to other care, 0; carried by dispensary, 41; under super., 48; under care at the House of Good Shepherd, 5. Tuberculosis—Discharged dead, 3; left town, 2; not T. B., 0; carried (positive), (supervision), 360. Total number of cases carried over into April, 642.

South End Dispensary Report.—Number of clinics, 88; surgical, 11; medical, 8; gynecological, 8; prenatal, 0; eye and ear, 13; venereal, 10; nerve, 3; nose and throat, 8; skin, 4; children, 8; lung, 4; children's lung (observation clinic), 4; clinics with doctor attending, 81; without doctor attending, 7; number of new patients treated, 209; old patients treated, 329; total number of patients, 1,038.

Industrial Dispensary (at Huyck's Mills).—Number of clinics held, 20; new cases treated, 38; old cases treated, 119; total number treated, 157; number of physical examinations, 0.

No industrial cases are really discharged, but we do not add them on to our cases carried nor do we add on the South End Dispensary cases as carried on our General Report. They are kept separate.

Signed, FLORENCE R. NOLL, R. N., *Acting Supt.*

The Albany Guild for Public Health Nursing.—Report for May, 1921.—Number of new cases this month, 182; classified economically: free, 29; bed cases, 7; prenatal, 9; dispensary soc. service, 0; tuberculosis (pos.), tuberculosis (super.), 12; venereal social, 1; paid, 153; limited means, bed cases, 91; Metropolitan bed cases, 42; Metropolitan prenatal, 19; Western Union, 1. Cases carried over from last month, 579; bed cases, 119; prenatal cases, 44; dispensary soc. service, 0; tuberculosis (total), 364; venereal, 51; Western Union, 1. Classification of bed cases: Medical, 78; surgical, 6; obstetrical, 42; prenatal, 28; confinements, 31; maternity, 11; miscarriages, 1; number of babies born, 42.

Visits for Nurses.—All departments, 1,817; for bed care, 1,265; prenatal instruction, 115; tuberculosis (sup. and inst.), 66; venereal dis. instr., 4; general social serv., 150; for other purposes, 148; dispensary social, 21; supervision, 48.

Source of Nursing Cases.—Metropolitan agents, 42; doctors, 82; nurses, 4; dispensary, 0; family or friends, 27; other sources, 13.

Disposition of Bed Cases.—Discharged recovered, 22; improved, 38; unimproved, 20; dead, 7; to other care, 25; carried, 114. Disposition of other cases: Prenatal: Discharged to maternity care, 42; to hospital, 8; other care, 4; carried, 42; dispensary social service: Discharged disp. care, 0; carried, 0; Venereal: Discharged cured, 1; left with perm., —; temporarily, 7; to other care, 0; carried by dispensary, 52; under super., 36; under care at the House of Good Shepherd, 27; Tuberculosis: Discharged dead, 7; left town, 2; not T. B., 0; carried (pos.), (super.), 365. Total number of cases carried over into June, 610.

South End Dispensary Report.—Number of clinics, 94; surgical, 12; medical, 8; gynecological, 8; prenatal 0; eye and ear, 17; venereal, 13; nerve, 3; nose and throat, 9; skin, 5; children, 8; lung (children), 4; children's lung (observation clinic), 4. Clinics with doctor attending, 91; without doctor, 3; number of new patients treated, 176; old patients, 767; total number of patients, 943; ear irrigations, 834.

Signed, Florence R. Noll, *Acting Superintendent.*

Fund Promised for Medical College.—After a meeting of the board of trustees of the Albany Medical College April 4, 1921, announcement was made that the college has been promised a maintenance fund of $30,000 a year, provided a similar amount is raised each year by the trustees. The Rockefeller foundation, of which Dr. Simon Flexner is director of laboratories, will give $20,000; the General Electric company, $5,000, and Dr. Charles Alexander Richmond, president of Union University, $5,000. The money this year must be raised by June 1 to make the $30,000 available.

Dr. Thomas Ordway, dean of the college, has been directed to proceed with the plans for developing and broadening the scope of the work. Summer courses, new equipment, a larger staff of teachers and added instruction will be among the benefits to be derived from the fund. College officials say that this fund will put the institution on a firm basis and will eventually provide a new building on the site already chosen on New Scotland avenue. A campaign to raise the fund for this year will be started immediately.

Waste of Infant Life.—Since 1915 the Federal Government has been able to keep a ledger for the birth registration area showing profit and loss in terms of infant life and death. The figures for a five-year period are given for 18 large cities in a brief report entitled "Infant Mortality in Pittsburgh," which has just been issued by the U. S. Department of Labor through the Children's Bureau.

Of the nine large cities in the birth registration area since it was established in 1915, Washington, Philadelphia and New York show the most satisfactory progress toward a reduction of rates, though Minneapolis has consistently maintained the lowest rate of any of the nine. In each year of the five-year period, 1916-1920, Pittsburgh lost more babies in proportion to its births than any other of the nine cities.

In Pittsburgh as a whole, in 1920, there was a loss during infancy of one life out of every nine. The rates varied greatly in different parts of the city, the rate in the most unfavorable ward being 157 deaths for every 1,000 births, while in the most favorable ward the rate was only sixty-four per 1,000.

Nearly one-half the babies who failed to survive died before they were a month old, when deaths are largely due to natal and prenatal causes. It has been clearly demonstrated that such deaths are largely preventable through care and instruction for the mother before the baby is born, and skilled care at and shortly after birth. Nearly one-fourth of the deaths were caused by gastrointestinal diseases. Deaths from these causes occur for the most part in the heat of summer. They can be reduced through instructions to mothers in the proper care and feeding of babies and through civic supervision to insure purity and proper handling of milk supplies.

Milk stations, maternity and baby clinics, and public health nursing service have been established in Pittsburgh. An extension of such services is necessary if the city is to deal effectively with the problem of infant mortality, and if the ledger for the next five years is to show saving in infant life.

The Volstead Law.—The following resolution was passed at the fifty-second annual meeting of the American Medical Editors' Association, June 7th, 1921:

Whereas, The medical restrictions of the Volstead Act, together with its various administrative and other interpretations and rules and regulations and enforcements, etc., constitute in some of their effects, indictment of the medical profession and harassment of the medical practitioner and the sick, and are obstacles to free pursuit of honest medical judgment and therapeutics, and have reacted to the detriment of society and the public health and are opposed to public policy;

And whereas, Some of these restrictions and rules and regulations and interpretations, etc., are not based upon consensus of medical experience and practice and established usage;

And whereas, It is apparent that they have not been framed and interpreted and administered with full appreciation of all matters involved;

And whereas, The precedent established by the Volstead Act in restricting medical practice, should, if physicians value their therapeutic liberty, be met with a protest that will command attention;

And whereas, The point at issue is the right of the physician to select his remedies, and to decide what doses of these remedies each patient requires;

And whereas, This issue in no wise affects and has nothing to do with propaganda either for or against prohibition, but is purely a matter of preserving the necessary rights of the physician in the interests of public health and public policy;

Be it therefore Resolved, That the American Medical Editors' Association protests against further undue regulation of therapeutic procedure by statutes or by administrative interpretation or regulation;

And be it Resolved, That the Association requests of the proper authorities a review and revision of such existing statutes or rules or regulations as may be unduly restrictive of the therapeutic judgment and procedure of physicians.

We ask this for the preservation of the necessary rights of the medical profession and in the name of public welfare and wise public policy.

VIENNA PHYSICIANS DESTITUTE.—Vienna is today battling for its very existence. The gay crowds of well dressed people and elegant equipages which once thronged the magnificent Ring and the lovely Prater have long since vanished. The fine trees of the Wiener Wald have become victims of the woodchopper.

A recent dispatch to the Musical Courier says: "Vienna is the saddest city in the world. If one is soft hearted, it is difficult to repress the tears as one wanders through its once brilliant streets. While one stops to greet a friend, three beggars or more appeal to one's charity. And such beggars: ragged and haggard, emaciated, yellow creatures that once knew joy. As one rides through the streets poor mothers with thin, paper-skinned babies look at one from the curb. Hands stretch out from everywhere."

A prominent New York banker, recently returned, says: "All that class (professional people) are left with absolutely nothing. All the time I was in Vienna I couldn't help feeling that I was living in a morgue. Beautiful streets, a beautiful opera house and the city beautifully kept—but nothing doing. It is terribly depressing."

Viennese physicians are in desperate straits. Their work must go on at all events, in an effort to combat the increasing mortality and alleviate the many ills of an undernourished population. But they cannot feed their little children with the scanty government ration, even when supplemented with their pitifully meager incomes.

The American Relief Committee for Sufferers in Austria, 261 Madison Avenue, New York, of which Hon. Frederic Courtland Penfield, late American Ambassador to Austria-Hungary is Honorary Chairman, has created a special fund for the relief of destitute Viennese physicians and surgeons.

Contributions may be made to Alvin W. Krech, President, Equitable Trust Company, 37 Wall Street, New York City, Treasurer of the Committee.

A BUST OF MORTON FOR THE HALL OF FAME.—In the election of Dr. Wm. T. G. Morton to the Hall of Fame the allied professions of medicine and dentistry have been singularly honored. By their overwhelming vote the electors have also evidenced the appreciation of the public at large for the beneficence of anesthesia.

Recently, at the annual dinner of the American Anesthetists in Boston, during A. M. A. Week, Dr. S. Adolphus Knopf, a leading advocate for the honoring of Morton, said it would be a proud privilege for the Associated Anesthetists to place a bronze bust of Morton in the niche assigned him by the electors. This is to be done on October 16, in celebration of the Diamond Jubilee Anniversary of Morton's First Public Demonstration of Ether Anesthesia.

The Associated Anesthetists, as well as other prominent leaders of the allied professions, are, therefore, urging all those interested to make a substantial contribution for this purpose. F. H. McMechan, M. D., Secretary-Treasurer, Lake Shore Road, Avon Lake, Ohio

THE LANCET.—*The Lancet* will hereafter be published by the Oxford University Press. Subscriptions to be mailed to American addresses should be sent to the Oxford University Press, 35 West 32nd Street, New York. Editorial communications should be sent to Oxford University Press, Amen Corner, London, E. C., England.

DIED.—Dr. HORACE C. MILLER (A. M. C., 1873) died at his home in Rensselaer, N. Y., April 11, 1921.

In Memoriam

ADDISON W. GOODALE, M. D.

Dr. **ADDISON W. GOODALE**, a graduate of the Albany Medical College in the Class of 1858, died at the home of his daughter, Mrs. Francis M. Hugo, in New York City on April 29, 1921. Dr. Goodale entered upon general practice in Jefferson County, N. Y., immediately after graduation until April, 1863, when he was commissioned as assistant surgeon of the 10th New York Heavy Artillery, and served until after the close of the war. In 1868 he was employed in the medical department of the Phoenix Mutual Life Insurance Company, and continued in this work for twenty years. He then retired from active practice and established his home in Watertown, N. Y. He divided his time between his home, his summer cottage among the Thousand Islands, and in Florida during the winter. He was a member of the medical societies of the county and State. Dr. Goodale attained his eighty-seventh year.

HARVEY J. CRISTMAN, M. D.

Dr. **HARVEY J. CRISTMAN**, one of Herkimer county's oldest and best known physicians died Friday morning, April 8th, 1921, at his home, 315 Prospect street, Herkimer. Dr. Cristman suffered a severe fall about a week before his death, and this was the ultimate cause of his death.

He was born in the town of Herkimer, October 27, 1840, and was the son of Milla Schell and Captain Jacob J. Cristman. He was educated in his early days at the Pine Grove school in East Herkimer, then attended Fairfield Academy and later the Albany Medical College, from which he graduated in 1864, and subsequently Columbia College. For forty years he practiced his profession in the town of Columbia, Herkimer county, and was a well liked and successful physician. He retired from practice and came to Herkimer to reside about sixteen years before his death, where he has since lived, being a man especially liked for his genial personality.

On January 19, 1870, he married Anna Van Horne who survives him, with no other nearer survivors than nephews and nieces. He was the last of his family.

Dr. Cristman was elected to membership in the Medical Society of the County of Herkimer in 1866.

CHRISTIAN G. VEDDER, M. D.

Dr. **CHRISTIAN G. VEDDER** died at his home in St. Johnsville, N. Y., on Sunday, May 1, 1921. Dr. Vedder was born in June, 1844, on the Vedder homestead, two miles north of St. Johnsville. He was graduated from the Albany Medical College in 1872. In 1863 he married Margaret

Ann Miller, daughter of Jeremiah Miller, who was one of the earliest settlers in St. Johnsville. Soon after his graduation he opened an office in St. Johnsville and practiced in the village until his death. He leaves his wife and three daughters.

LAURENCE KENNY, M. D.

Dr. LAURENCE KENNY, an alumnus of the Albany Medical College of the Class of 1887, died on March 6, 1921, at his home, 40 Ferry St., Troy, N. Y., after an illness of several weeks.

Dr. Kenny was a native of Albany, and after graduation began practice in Watervliet. He afterward removed to Troy where he continued in active work for thirty years. He is survived by his wife, who was formerly Miss Priscilla Matthews, a sister, a brother and two nieces.

FRANK GARTEN, M. D.

Dr. FRANK GARTEN, an alumnus of the Albany Medical College of the Class of 1908, died at his home, 1421 Glover Street, Westchester, New York City, on April 2, 1921. Dr. Garten was born June 25, 1891, was educated in the public schools of New York City and graduated from the Morris High School. After graduating in medicine he served as interne at the Willard State Hospital, and in the same year entered upon general practice in the home where he lived until his death. He was a successful practitioner and active in the intellectual avocations of his profession. He was an instructor in the Fordham Medical College and held membership in the medical societies of the State and county. He was also active in the New York Athletic Club, and during the war served as surgeon in the Army at Fort Schuyler, N. Y. He is survived by his wife, who was Miss Elsie M. Gray, of Albany, and four children.

Current Medical Literature

REVIEWS AND NOTICES OF BOOKS

The Form and Functions of the Central Nervous System. By TILNEY and RILEY. Published by Hoeber, New York, 1921.

Teachers of neuro-anatomy have long felt the want of a book correlating gross and microscopic anatomy with morphology and physiology, especially the physiology of the central nervous system revealed by clinical studies. Dr. Tilney has taken steps to fill this want and has produced a book combining the embryology, anatomy and physiology of the brain and spinal cord. In addition to the physiology of various parts of the central nervous system he has given us the principal clinical syndromes associated with lesions of those parts, illustrated by case histories. In this part of the work he has borrowed freely from Dejerine, special credit being given to him in the preface. By the addition of an excellent glossary, references for supplementary reading and a fair index, the work forms a valuable reference book for teachers and students.

It is doubtful if it can be of great use to the average medical student or general practitioner; it is too large and expensive. Moreover, certain defects detract from its value to a conscientious student. Possibly such a sentence (p. 50) as, "nerve cells are constantly generating, receiving or storing up nerve impulses," might be open to criticism. Can one say on any known grounds that nerve cells actually 'generate' or 'store up' impulses? Such sentences are easily written but difficult of proof. Again (p. 61), "The myelin sheath of an axone is regarded as a secretion of the neuroglia cells." The demonstration of the secretory function of neuroglia and the proof that the substance secreted is myelin seems to carry us pretty far afield from our known physiology. But perhaps a more important defect in the eyes of a student is one so common in text-books using borrowed illustration; the lack of co-ordination, so to speak, between the text and the caption of the illustration. For instance, as I read the text (p. 58) about dendrites I find that "each dendrite has upon its branches a number of minute *globular bodies,* known as *gemmules, spines* or *varicosities.*" I am not referred to an illustration, but I see on page 59 a picture labeled as follows: "Fig. 59.—Giant cell of the inferior part of the cornu ammonis of a rabbit. Method of Ehrlich-Bethe (Cajal)," and in fine print below it what I want, "varicosities of the dendrite enlargements." Would it not be better to invert the caption and have the title: "Globular bodies, known as gemmules, spines or varicosities upon branches of a dendrite." The borrowed title could then appear below. Also, in regard to illustrations; the reproduced photographs of sections of the spinal cord on page 145 are hardly more than black smudges. Are not good outline drawings preferable to photographs? On page 715 (Fig. 478) credit is given to Willis for a very poor reproduction of the base of the brain and circle of Willis. I doubt if Willis, or rather, Sir Christopher Wren, who did his drawings for him, would claim it. Three very excellent drawings by Bourgery are shown but I could find no reference to him in the index of list of references.

In spite of numerous other small errors, such as spelling (Fig. 163, 342) the book has great worth. Nothing finer or clearer has been done than the diagrams (Figs. 163-170) illustrating the various pathways of the impulses playing on the anterior horn cells. The pictures of the ventral, lateral and dorsal views of the spinal dermatones are excellent. Certain parts of the text are specially strong; the description of the morphology and anatomy of the whole endbrain is masterly as well as the summary of the functions of the basal ganglia. The best illustrations are those of the whole brain sections in the chapter on the endbrain. On the whole the book will be of great use to teachers of neuroanatomy.

HENRY VIETS.

Fractures of the Neck of the Femur. By ANTOINE BASSET, Chirurgien des Hôpitaux, Professeur agrégé a la Faculté de Médecine de Paris. In one volume with 22 plates. Felix Alcan, Paris, 40 francs net.

In this work, illustrated with numerous figures and radiographs, the author again takes up a complete study of fractures of the neck of the femur, considering successively all phases of the subject from definition and classification to treatment.

His work is based upon 128 unpublished observations, the examination of a large number of anatomical specimens and a series of personal researches on the arterial circulation of the upper end of the femur. He also explains in detail the ideas of Professor Pierre Delbet upon fractures of the neck of the femur, the therapeutic methods employed by him and in particular the operative technic of fastening the fracture without arthrotomy.

Following the introduction the work is divided into ten chapters, the titles of which are:

1. Classification.
2. Etiology.
3. Architecture of the neck of the femur.
4. Vascularization of the neck of the femur.
5. Pathological anatomy.
6. Evolution anatomy (repair of fracture).
7. Symptoms.
8. Course of the lesion-complications-prognosis.
9. Diagnosis.
10. Treatment.

The last 160 pages of the work are devoted to a consideration of the methods of M. Delbet, together with discussions of operative technic, instrumentation and the notes on 117 observations.

The plates, 22 in number, are inserted at the end of the text.

J. MC W. B.

NEUROLOGY.

The Diagnosis and Teatment of Hydrocephalus Resulting from Strictures of the Aquedvct of Sylvius.

DANDY. *Surgery, Gynecology and Obstetrics,* 1920, *XXXI,* 340.

Dandy believes that about sixty-six per cent of the cases of congenital hydrocephalus of the obstructing type are caused by occlusions of the acqueduct of Sylvius. These can be demonstrated by the dye test, originally described by Dandy and Blackfan in 1914.

He reviews the literature of twenty cases of this type. He believes that the cause of the stricture of the acqueduct is due to intra-uterine inflamations causing adhesion. As spontaneous relief of this condition is not possible he suggests a surgical procedure directed towards the construction of a new acqueduct. This operation he has performed in two cases. Sounds are passed in gradually increasing sizes from the fourth ventricle into the third ventricle until a communication is established; then a small rubber catheter is passed into the newly made channel and left in position for a period of two to three weeks. He leaves the tube in as long as possible with the hope that epithelization of the iter will take place, thereby preserving the lumen after the tube is removed. One child of five years of age died seven weeks later of pneumonia, the other child is still alive one year after the operation, and apparently has made some clinical improvement. The operation is described in detail with illustrations of each step. HENRY VIETS.

A New Procedure for the Prevention of Spinal Puncture Headache.

BAAR. *Medical Record*, 1920, *XCVIII*, 598.

Baar has made a clinical study of many hundred spinal punctures and finds that the only valid explanation for the headaches is epidural leakage of the cerebrospinal fluid through a patent puncture hole. The normal water pad thus being removed, the brain rests unprotected on the irregular bony surface of the base of the skull, causing an irritation of the dural fibers of the fifth and occipital nerves. He finds that by intravenous injection of salvarsan or 0.5 per cent Na Cl (500 to 750 c. c.) immediately after puncture, the incidence of post-puncture headache is much reduced. He now follows up every spinal puncture with either intravenous salt solution, if not giving simultaneously salvarsan, and finds headaches reduced from 55 to 6 per cent. HENRY VIETS.

NEW YORK STATE MEDICAL LIBRARY.

Edited by Frances K. Ray.

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VOL. LXII JULY, 1921 No. 7

ALBANY MEDICAL ANNALS

Editorial

To Plato, the science of medicine appeared to be of very disputable advantages. He did not indeed object to quick cures for acute disorders, or for injuries produced by accidents. But the art which resists the slow sap of a chronic disease, which repairs frames enervated by lust, swollen by gluttony, or inflamed by wine, which encourages sensuality by mitigating the natural punishment of the sensualist, and prolongs existence when the intellect has ceased to retain its entire energy, had no share in his esteem. A life protracted by medical skill he pronounced to be a long death. The exercise of the art of medicine ought, he said, to be tolerated, so far as that art may serve to cure the occasional distempers of men whose constitutions are good. As to those who have bad constitutions, let them die; and the sooner the better. Such men are unfit for war, for magistracy, for the management of their domestic affairs, for severe study and speculation. If they engage in any vigorous mental exercise, they are troubled with giddiness and fulness of the head, all of which they lay to the account of philosophy. The best thing that can happen to such wretches is to have done with life at once. He quotes mythical authority in support of this doctrine; and reminds his disciples that the practice of the sons of Æsculapius, as described by Homer, extended only to the cure of external injuries.

THOMAS BABINGTON MACAULAY.

Francis Bacon.

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An Historical Fragment. Dean Ordway has recently retrieved from the musty archives of the Albany Medical College a pamphlet reprint of an address by Dr. Alden March upon the "Expediency of Establishing a Medical College and Hospital in the City of Albany," and the arguments and reasons given by Dr. March have excited no little surprise among those who have been fortunate enough to peruse this illuminating document. The reader's first emotion is that of acceptance of the inevitability of the repetition of history, and the circumstances of a century ago upon which Dr. March based his plea seem wonderfully like those of the present day. The same needs of the sick poor, the same inroads of ignorant and helpless immigrants, the same demands of higher education, the same appeals to public spirited citizens, the same columns of figures and statistics have no ring of novelty to those who have struggled to maintain this institution in the face of the disheartening social, ethical and economic conditions which for several years have threatened its existence. Dr. March evidently believed that in a country of such vast extent as ours educational facilities should not be confined to the few large cities, but that in every community there should be some centre of culture and learning, and that there by disinterested devotion to the higher ethical standards and contempt of "sordid accumulation of wealth," the physician should be "ranked among the benefactors of mankind," and he urged that the simplest and most effective method of developing this individual character lay in the business of teaching. And the discussions of to-day seem merely an echo of his urging for the physician of thorough preliminary education, systematic instruction, practical laboratory and clinical experience, and research. He deprecates the "itinerant lecturer," and his remark recalls some interesting collateral information on this phase of medical instruction which was given a few years ago in the unique biography of Dr. Lyman Spalding. Dr. Spalding was a lecturer at the Fairfield Medical School in Herkimer County, New York, and describes its shifts for lecturers for anatomical and clinical material, and its struggles with the legislature in Albany for concessions and for funds. Dr. March viewed without favor these temporizing methods and between the lines of his appeal may be read the purpose to do away with educational schemes based upon expediency and lacking permanency. He believed so important a structure as a medical school should be fixed in a civic centre, from which its influence and the influence of its teachers and officers might radiate throughout the community. In this he inaugurated a reform and he lived to see the standards of practice elevated and placed upon a secure basis. It is refreshing now to know that to his firmness of character and purity of purpose the College owes its continued existence. Under the fluctuations of a century an institution grounded on anything less than the highest ideals must have perished, and many, less securely fixed in purpose and in repute than the Albany Medical College, have perished. There have been three critical epochs in the history of the College, if its birth may be regarded as one, and these appear to represent the vigor of a human generation. The first faculty presided over its destinies for about thirty years, and there was then need of rejuvenation. This episode was not passed without friction, and from 1870 to 1876 there were many changes in the faculty and some personal feeling which resulted in reorganization in the latter year. The "new blood" brought in the microscope and the bolder surgery incident upon antisepsis and asepsis. For another thirty years the College went peacefully on its way, and then, with some commotion again, a younger group were appointed to continue the elaboration of the specialties and to emphasize the indispensableness of the laboratory.

A dispassionate review of the career of the College reveals the progress, step by step, of scientific knowledge and professional education. It is now experimenting with the two great problems which engage medical thought: the problem of local diseases, largely a question of surgery, and the problem of general or constitutional diseases, largely a question of medicine. Possibly the line between these two problems is indistinct, but activity and enthusiasm, a close study and correlation of facts will bring about a common conclusion by the united efforts of all who are engaged in the inspiring work of this combined hospital and college.

The details and methods differ from those of Dr. March, but the principles are identical and his institution will progress upon the fine lines upon which it was established. History, after all, does not repeat itself: it just goes on from day to day.

Realizing the important bearing of Dr. March's address upon conditions of the present the Trustees of the College have authorized its reproduction and it is here given in *fac simile*. Graduates and friends of the College and all others who are concerned with the practice and study of medicine will find much of interest in this classic of a by-gone day.

LECTURE

ON THE EXPEDIENCY OF ESTABLISHING A

Medical College

AND HOSPITAL

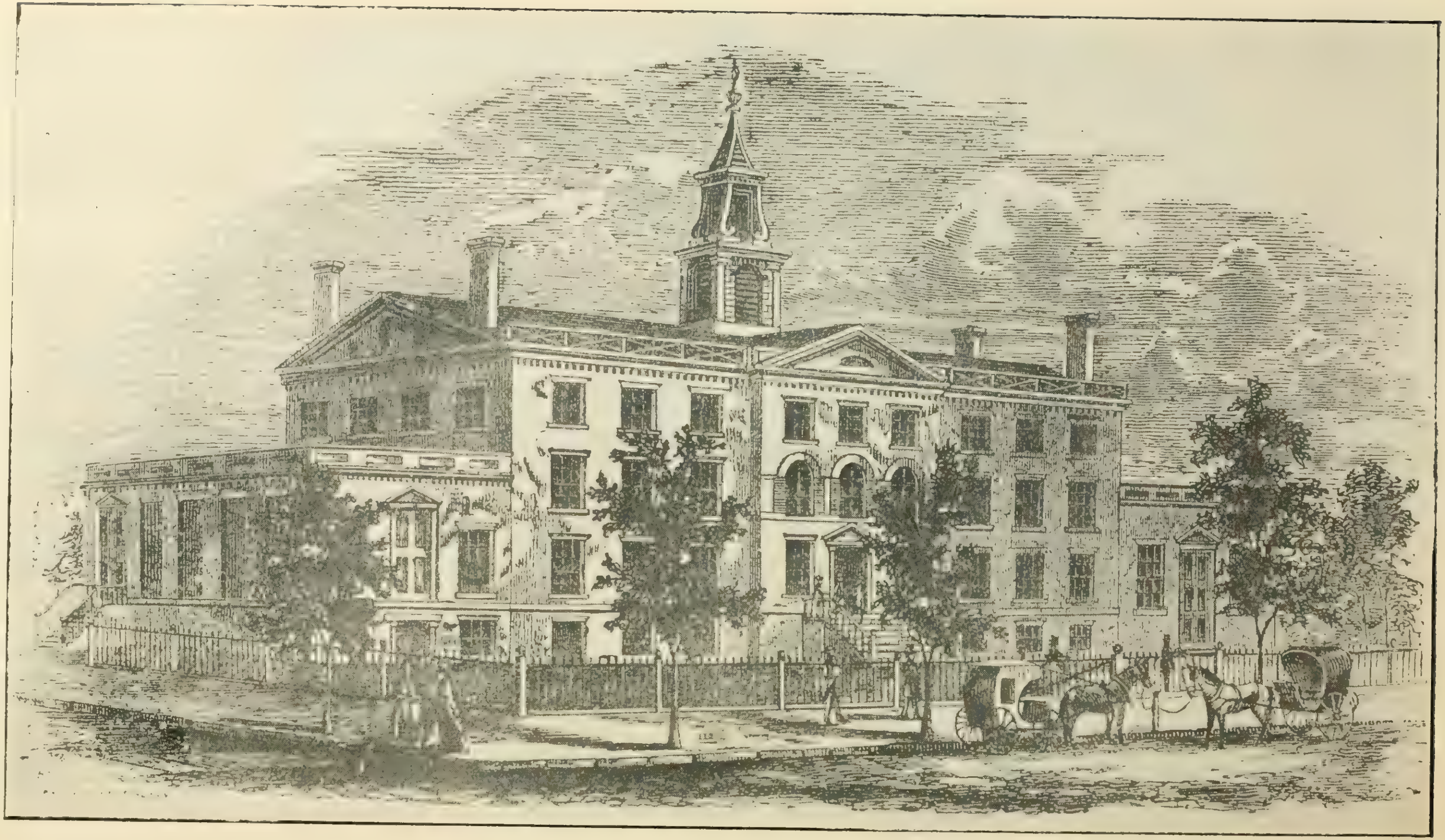
IN THE CITY OF ALBANY.

DELIVERED JANUARY 11th, 1830; INTRODUCTORY TO A COURSE OF

Anatomy and Operative Surgery.

BY ALDEN MARCH, M. D.
Professor of Anatomy and Physiology in the Vermont
Academy of Medicine, &c.

ALBANY.
Printed by L. G. Hoffman, 44 Dean street.
1830.



UNION UNIVERSITY
MEDICAL DEPARTMENT
ALBANY MEDICAL COLLEGE
ALBANY, N. Y.

June 10, 1921.

To the Alumni and Other Friends of
The Albany Medical College:

The words of Dr. Alden March, written in 1830, expressed so well the importance of establishing a medical school in Albany, that we have felt, in inviting your active cooperation at the present time in maintaining and improving the Albany Medical College, that the reprinting of Dr. March's address would be particularly appropriate on this centenary of his first course of demonstrations and lectures in Anatomy; representing as it does the one-hundredth anniversary of the teaching of medicine in Albany.

(Signed)

Edmund N. Huyck
Alden Chester
Robert Olcott
Luther H. Tucker
Amasa J. Parker
Frederick Townsend
Charles Gibson
Charles A. Richmond
George Alexander
Edgar S. Barney
Franklin H. Giddings
Charles B. McMurray
Francis C. Pratt
Willis R. Whitney
Frederick W. Kelley
Ellis J. Staley
Gerrit Y. Lansing
Benjamin W. Arnold
William Barnett
Henry M. Sage
A. Page Smith
Walter H. Conley
James R. Watt
Edward Easton, Jr.

Trustees, Albany Medical College,
Medical Department, Union University.

Albany, January 12th, 1830

Dear Sir:

A number of gentlemen, who were present at the delivery of your introductory address, conceiving the objects contemplated by you, too important to the cause of humanity and the interests of science, not to have your views made more public than the nature of the circumstances under which they were offered, could be supposed to admit, have conferred on us the honor of presenting to you their grateful acknowledgments, and requesting a copy of the address for publication.

We are, sir, with sentiments of respect,

Your obed't servants,
L. WELLINGTON
A. F. LAWYER
O. CROSBY, JUN.
Committee.

To Professor Alden March, M. D.

Albany, January 12th, 1830

Gentlemen:

In replying to your complimentary note received this morning, requesting a copy of my introductory address for publication, permit me, through you, to tender my thanks to the gentlemen assembled, for this favorable expression of their approbation.

This familiar lecture was not designed for the public eye; and although, owing to the multiplicity of my avocations, it affords but a hasty and imperfect sketch of my views upon this important theme, yet I cannot refuse complying with your polite request, hoping thereby to advance in some degree, the interests of the cause already auspiciously commenced.

I have the honor to be, gentlemen,

Very respectfully, your obed't servant,
ALDEN MARCH.

L. WELLINGTON, M. D.
A. F. LAWYER, M. D.
DOCT. O. CROSBY, JUN.
Committee.

Lecture

Gentlemen:

The return of another season has called together the teacher and the pupil; and with this laudable meeting are associated some of the strongest interests of the community.

We are assembled for the purpose of communicating and receiving instruction in the science and the art of medicine,— the science and the art of restoring and preserving the health and the life of man. The value of our pursuits, therefore, can be estimated only by the value of life itself, and of that which alone endears it to its possessor,— health.

The enlightened and judicious practitioner of medicine is justly ranked among the benefactors of mankind. In proportion as his time and talents are employed in acquiring an accurate and extended knowledge of his profession, in the same proportion will he become useful to his fellow citizens, and be entitled to their approbation and support. He should not be devoted to the mere sordid accumulation of wealth. A more noble, generous and humane motive should hold the first place in his sentiments and actions. Prevent and relieve human misery, should be his motto, engraven in indelible characters on the tablet of his heart. No real benefit can result from the services, or acts of one man rendered to another who is languishing under pain and disease, unless the one has more knowledge of disease and of remedies than the other. The question then arises, how are we to become possessed of a proper knowledge of the science of medicine, thereby to render an essential service to the sick. It is evident that, as an incipient step, a preparatory education is required; a knowledge at least of the useful branches of general science, if not of the classical languages and literature.

The means of obtaining this preliminary education are abundant, and brought within the reach of almost every student of medicine. Our country is supplied with numerous and well regulated colleges of arts, academies and schools for private instruction. In such institutions is to be laid the basis, upon which the superstructure of a medical education is to be erected. Though I must here confess with much regret, that by far too many young men enter upon the study of our profession, without a due regard to a preparatory education. True it is, that men have reached the highest eminence in our profession, without having been graduates in arts. John Hunter, Sir Astley Cooper and John Abernethy are striking examples of the eminence of character to which a man may arrive, by the force of native talent and genius. We might also specify with pride, individuals among our own countrymen. But is this any proof that the same men would not have shone more conspicuously in the literary and scientific world, if they had enjoyed all the advantages of a good early education?

Formerly the science of medicine was not taught as thoroughly and as systematically as it is at present. Within my recollection, the time was, when we had but few schools of medicine in this country, and when but a small proportion of the whole number of young men who were studying medicine, attended lectures at any public medical school. Without the advantages of a public medical school, or the same advantages enjoyed by private instruction, no man ever was, or can be well qualified to practice in the various branches of our profession. Without having an opportunity of being instructed in practical anatomy, and without founding upon this knowledge, correct principles of surgery, the surgeon, at least, was constantly liable to mis-judge and to commit the grossest errors.

To illustrate and to enforce this assertion, I shall here relate an anecdote of a surgical case that occurred in the western part of this state as recently as during the late war,— perhaps about fifteen years since. As the story was related to me, it appears that a man in the vicinity of Sackets-Harbour was affected with a tumor, situated in the ham. It had been of some months standing when a physician was called to attend the case. He took the swelling to be a common phlegmonous abscess — accordingly ordered a succession of poultices, and to his great surprise, after persevering for a considerable length of time, he found no more symptoms of a spontaneous discharge from the tumor than at first. Being at this time rather at a loss to know what the contents of the tumor were, he determined on thrusting his lancet into it at once; which, however, was no sooner done, than the surgeon and patient were both deluged in blood! By this time we infer that the physician, or surgeon, if he is thought entitled to the latter appellation, was fully and awfully apprised of the dangerous nature of the disease. In this place we must do him the justice to say that he had sufficient presence of mind to command the hemorrhage, by passing a fillet or ligature around the thigh, with which he succeeded in compressing the femoral artery. In this dilemma, it seemed to be the only object of the physician, to save the life of the patient if possible; though it is presumed from what followed, that he did not even as much as dream that the limb could also be preserved, a useful member to his patient. Accordingly a neighboring physician was sent for, to meet with him in consultation, and to determine on the proper course of treatment. The result of the consultation was, to amputate the limb above the situation of the diseased part. But neither the attending, nor the consulting physician had the necessary instruments for operating. However to turn necessity to the best account, they sent to a house-joiner, and obtained a sash-saw; and to a shoe-maker, and procured a shoe knife; and with these, together with a few other domestic instruments, picked up, or prepared on the spur of the occasion, they proceeded to operate, and save the life of the patient; though, we presume, the loss of the limb was entirely overlooked, when they reflected on the wonderful surgical feat they had performed. At the present day, a surgeon would be held responsible for a man's limb, thus unnecessarily sacrificed to sheer ignorance, as it inevitably appears that this must have been. Had they known that the femoral artery could be taken up, and that the hemorrhage could be thus arrested, and the limb preserved, in all probability the patient might have been a living and perfect monument to reflect honor upon their skill, instead of being a mutilated object, to reflect disgrace upon these individuals not only, but through them, upon the whole profession.

Since the facilities for obtaining medical and surgical knowledge are diffused throughout the civilized world, mistakes of this kind very rarely occur to physicians of the present day. And if any one thing has contributed more than another, to disseminate medical and surgical knowledge among the common ranks of our profession, it is the circumstance that medical instruction is now within the reach, and is carried almost to the very doors of all who may seek it.

Numerous as are our medical schools, and as much rivalry as there appears to be among them, still I conceive no evil to the profession generally, nor to the community has thence arisen. It is alleged by some that we have medical schools enough, and more than enough and that by establishing new ones, we incur the risk of impairing the value and utility of those that already exist. If this argument be true now, why was it not equally so, in application to the same subject, fifteen or twenty years ago, when there were but about half the number of medical institutions in this country, that there are at the present time? And suppose, as most likely will be the case, the population of the United States to increase in the same geometrical ratio that it has for the last twenty years, should we then say the present number of colleges of arts, of academies, and of common schools, or even of medical colleges are sufficient for the demands of this vast increase of population? Surely facilities for acquiring literary and scientific information must accumulate and extend in proportion to the increase and demands of the population.

In connection with these sentiments, I propose to make a few remarks upon the subject of establishing a hospital and medical college in the city of Albany.

Before I enter upon the subject, I trust my audience will gratify me with their patience, while I briefly state the origin and progress of this private course of medical instruction.

I came to this place in the autumn of 1820, and in November 1821, I commenced a course of demonstrations and lectures in anatomy, to a class of 14 students; and from that time to the present, which is the commencement of my ninth course of lectures in this place, there has been a gradual increase in the number of the pupils, so that last year our class exceeded thirty in number. I shall not obtrude upon my audience, a recital of the many difficulties that were constantly rising up at the commencement of my career in this place, as I advanced step by step. Suffice it to say that it was an undertaking which required nerve and sinew, (if I may be allowed the technical phraseology) to carry the project into effect. My efforts however, have been pretty uniformly crowned with success. I have had but little assistance in the line of instructing, except such as has been rendered by my distinguished colleague Dr. Tully. Our exertions were united in this infant establishment for the purpose of aiding the growth of a well established medical institution in the city of Albany. As it respects myself, I have no doubt but my humble merits have been duly appreciated; and it is with feelings of sincere regret, participated, I doubt not, by my auditors, that I notice the absence of Dr. Tully, whose eminent attainments in literature and science, and unbounded qualifications in our profession, have caused his removal from this city to an honorable situation in an institution, where from a longer acquaintance, his talents and acquirements are better known, and of course more highly valued. But however deserving the subject of these remarks may be, the present is not the time nor the place for eulogizing the living.

I shall now proceed to notice the several circumstances that require deliberate consideration, before we adopt any measures towards establishing a medical college in the city of Albany.

Firstly — It will be necessary for us to show that the location of this city is good, possessing many advantages, and but few disadvantages.

Secondly — That an institution of this kind is required in this place, and that it will be useful to the public.

Thirdly — That the object is practicable.

We shall prove by a reference to other medical institutions, both in the city and country, of the management of the concerns, of which, we claim to be familiar, that a place of this size, unites the advantages of both a large city and the country; and that it commands some advantages that neither enjoy individually.

In the first place, this city is sufficiently large to afford ample employment in the practice of medicine, for the several professors in the intervals of the regular courses of lectures.

Again, it is large enough to give us most, if not all the advantages of a hospital, including a sufficiency of subjects.

I am well aware that the above points are strongly urged by the supporters of the schools of our large cities, as being all important, and I will readily allow that the first has the highest claims for regard, in selecting a location for a medical school. No one can fully conceive the inconveniences of having a school located in a place too small to afford employment to the professors in the intervals of the lectures, except those who have suffered from the evil. It is not confined to an individual, but its influence is extended to the very vitals of the school. For what confidence can the public have in the stability of an institution where there are frequent changes in its professors? If the question be asked,— cannot this be obviated and still keep up the reputation of the school? I answer, that it can in one way, and in one way only. I shall state it, though objections can be raised even to this. The only way of permanently retaining able professors, is to give them a salary that would support them and their families handsomely, without their attending to any other duties than those which are directly connected with their professorship. But even though the institution had the means to meet these heavy salaries, yet a strong objection would very soon grow out of this plan. These professors, though able men, would soon become mere theorists, if not visionary speculators. They could not be sound, practical men, which seems to be at least important, if not absolutely necessary, in most of the branches of our profession.

Men, that are capable of filling a place in a public medical school, can generally command a respectable business in private practice. This they could not, nor ought not to relinquish, unless the pay of the professorship was a sufficient inducement. We make the assertion then, that a moderate income from a school in this place, would be better for those practitioners who might be engaged in it, than twice the amount, and even much more, received from a country institution, where the practitioner would be under the necessity of abandoning his friends and practice, for the time being at least, to a very great disadvantage.

There are other objections to being an itinerant lecturer; but as some of them, to say the least, relate to the affairs of domestic life, I shall not notice them in this place.

With respect to the advantages of a hospital, it may be stated that we have a population of upwards of twenty thousand, as estimated by good judges, and of this number a pretty large proportion, in comparison with the population of many other places, are foreigners, destitute and friendless. A large number of this class of people too, are liable to all the diseases "which flesh is heir to;" and as they are dependent upon public charity for relief, there seems to be a kind of moral obligation on their part, to repay the public by affording a clinical school in medicine to the young and inexperienced part of the medical profession.

Nor are the advantages of a hospital confined to the young practitioner and medical student alone. It affords an opportunity for the grey headed practitioner to keep up with the improvements of the day, and in instructing others, to instruct himself. It is universally conceded, that no man can qualify himself so well, in any branch of science or literature, as by teaching others. Here it is that he is compelled to become master of his subject; and his talents, and strongest energies are called into action.

Neither is the benefit confined to the teacher and the pupil. The physician, or physicians, who are in habits of intimacy with the teacher are also benefitted in a great degree, by a practical school of medicine, such as is afforded by a well regulated hospital. Nor does the advantage cease here.— The public comes in for its share of the benefit.

It is to be distinctly understood then, that by getting up a public institution of this kind, its benefits are not to be confined to the poor, nor to the physicians and surgeons who might be employed in it.

One of the advantages, that is expected to extend to the public by establishing a hospital and medical college in this place, is, the probability of elevating the character of the profession in this city, not only, but in a good degree its influence must extend to our neighboring physicians.

We hope and trust, therefore, that our citizens will view the project under consideration, in a far more extended light, than that of a mere public charity, designed solely for the relief of the poor.— And as far as the subject has been discussed among the friends of charitable institutions, and among those interested for the advancement of medical science, and also among those who take a deep interest in all general improvements in the city, it seems to have been uniformly favorably received.

The advantages, or perhaps I ought to say the only advantage which a country institution has over one located in a city, is the extremely low rate at which students are enabled to attend the lectures, and which principally regards the price of board and tuition. Now both of these items can be made reasonable in the city of Albany,— and with respect to the first, I am prepared to say, that any number of medical students can procure good wholesome board and lodgings in this city, for two dollars a week, though they may go as much beyond this sum as they please. Upon this subject, I speak with the utmost confidence, as we have had for several years past, quite a number of students from our office, boarded and lodged for the sum that I have named.— Then again, our lecture fee need be but a trifle more than that of a respectable country school. So that the extra charges on these two items, ought not to exceed the sum of twenty or twenty-five dollars for each course of lectures.

I shall, now, notice the sources from which it is expected that from eighty to one hundred students may be collected, within two or three years at farthest.

We can determine this point, with almost a certainty, by referring to the following statistical table.

Whole No. of Students attending the Vermont Academy of Medicine in the years	No. from the State of New York	Whole No. of Students attending the Berkshire Medical Institution in the years	No. from the State of New York
1823-126	41	1823- 84	18
1824-124	50	1824- 94	23
1825-101	42	1825-112	30
1826-103	34	1826-104	34
1827-100	33	1827-106	27
1828- 94	38	1828-100	13
Total No. from N.Y.	238	Total No. From N.Y.	145

It will be perceived by the above statement, that there has been an average annual number, for the last six years, of nearly sixty-four students from this state, who have attended at the schools in Vermont and Massachusetts.

We shall now refer to the catalogues of the Fairfield school, for the last two years, to ascertain how many students have attended from this and several of the counties in its vicinity. On examination, we find that the number of students from the counties of Albany, Saratoga, Rensselaer, Montgomery, Washington, Columbia, Schoharie, and Schenectady in 1827-1828, amount to twenty-four, and that from the same counties in 1828-1829 amount to twenty-three. Now, these twenty-three or four, added to the average number for the last six years, attending at the other two schools, as above stated, and also about twenty in Albany and its immediate vicinity, who have been in the habit for a number of years of attending a private course in this place, and who have not attended a public course in the same season, will give us something more than one hundred.

In making this statement, it will be perceived, that we have not calculated upon any that may now attend from year to year at New York, Philadelphia, New Haven, or Boston Schools, nor upon any that might be induced to come into the state from Connecticut, Massachusetts, or Vermont.

I may here observe, that medical students cannot be induced, or coerced by legislative enactment, to attend medical lectures at any other institution, than that of their own choice. This assertion is proved, by the fact that there were but seven students who belonged north and west of the city of Hudson who attended medical lectures in the State School in the city of New York the last season. This would seem to support the opinion of a distinguished individual, who has said, that, "It should be borne in mind, that a monopoly of learning, or knowledge, cannot be created by legislative enactment." "The fostering care with which the arm of power confers and sustains exclusive privileges in science, neither stimulates the exertions, increases the capacity, nor elevates the views of character of those who may enjoy them."

"A monopoly of the business of teaching, may indeed be effected; but should it even be conceded, that this would produce higher attainments in literature in the few, it cannot effect a more general diffusion of knowledge throughout the public mind, or, be productive of so much general benefit."

As it respects the argument of some, who say there are two classes of medical schools in this country, viz. the city, and the country institutions, and if one were to be located in this city, it would be ranked among the former, and that the expenses of attending a course of lectures in this place, would be about the same that they are in the city of New York or Philadelphia, we conceive it to be groundless. — One moment's reflection will set this matter in its true light. If it is, or has been an object for me, or for any other practitioner of this place to leave our business, and lecture in a country institution at the rate of ten dollars for each student, it must be obvious that we could quite as well afford to lecture in this place for the same sum, and in the meantime attend to our regular and stated practice among our private patients. I, for one, would prefer giving a course of lectures in this place, and attending to my private practice during the time for five hundred dollars, to going to a country institution and receiving twice the sum for the same services:—and at the end of three years, I have no doubt that I should be the gainer in a pecuniary point of view, as well as in reputation.

Let us suppose there were six professors, who should compose a faculty in a medical school at this place, with a fee of ten dollars each,— board and lodging to be obtained for two dollars a week, as it can be in this city,— and the course to consist of sixteen weeks:— the expense of board and lodging would be thirty-two dollars, and the fee for all the tickets sixty dollars, making a total of ninety-two dollars. Adding a few dollars for contingencies, might make the whole, in round numbers, about one hundred dollars. Certainly, this is far from being an exorbitant sum for a complete course of medical lectures.

Perhaps it may not be entirely impertinent, here, to allude to the facilities which this city affords for traveling in all directions, and in every mode of conveyance, and in which it probably is not surpassed by any place in the Union. A considerable number of medical students now pass annually through this city, on their way to their respective institutions; while on the other hand, in reaching some of the interior colleges, they often experience serious delays and inconveniences, and are sometimes, for a part of the distance, even obliged to resort to the expense of a private conveyance.

We have, thus far, proceeded upon matters of fact; and if we may now be allowed the liberty of reasoning exclusively upon the subject, I think it can be made out conclusively, that a medical institution is required in this place,— that it would be supported, and that it would be useful to the public. In entering upon these points, it will be perceived that we embrace our second proposition.

It evidently is the true policy of the state, to retain its circulating wealth, as far as is practicable, in its own territory. Money that is carried out of the state and expended, by medical students, rarely, if ever returns. The expenses of a full course of lectures at the Castleton or Pittsfield Schools, cannot vary but little from eighty dollars and this, multiplied by sixty-four, the average number of students going from this state for the last six years, will give us the sum of five thousand, one hundred and twenty dollars annually. A medical institution is farther called for in this place, because it will best accommodate the students who now go to Vermont and Massachusetts for their education.

Besides the benefits of a medical college, even with regard to the diffusion of useful knowledge, will by no means be exclusively confined to the profession for which it is more particularly established. The science of medicine is so comprehensive that it might almost be defined the science of nature. Anatomy, Physiology, Zoology, Botany, Mineralogy, Chymistry, are interesting to every lover of knowledge; and some of these branches cannot be thoroughly studied in the present day, except in medical schools. The science of medical jurisprudence also, is as important to the practitioner at the bar, as to the physician.

These are matters in which the public is interested; and if we were, now, merely to allude to local interest, we should barely remark, that it requires not the least argument to convince any one of the importance of the acquisition of an institution like this to the city of Albany.

If a professor is in pretty good practice, as there is no doubt but he might be, were he a practical man, it requires no enormous salary from the professorship, to induce him to engage in it. One hundred students, or even seventy-five, at ten or twelve dollars each, would amount to a very considerable sum. We repeat therefore, that a school can be supported in this place, with as much certainty as perhaps in any other in the Union.

In showing that the object, under consideration is practicable, we shall be under the necessity of referring to some of the arguments that have already been brought forward in support of other positions.

If we were to consider this point in detail, it would be necessary for us to take it up in the regular order in which we should proceed, were we now actually to engage in the undertaking.

And in the first place, it is necessary that the subject should be well digested, and a kind of plan stretched out by some one who is familiar with it in all its bearings. The first step, then, will be for us to make a judicious selection of a number of gentlemen for a board of trustees or corporation.

In the next place, it devolves upon those more immediately concerned, whether of the number selected for the corporation, or others, to make all the interest possible with the medical public, particularly in this vicinity. Nor should it be confined to medical men only. Every liberal and enlightened citizen should be well informed upon the subject, and his influence brought to bear and co-operate with the physicians.

It is preposterous to suppose, that all the learning and talent of the immense population of this country, is, or can be concentrated in one or two sets of medical teachers, as has been argued by the friends of a monopoly.

After it is made out that we have selected a good location for our medical institution, that it possesses all the advantages heretofore enumerated, that the wants of the public now call for it, and that all preliminary measures respecting its organization have been completed, the important question remains, can we obtain a charter, that will secure to us, all the rights, privileges, and immunities, usually enjoyed by similar institutions? The brief answer to this question is, that the entire success of the measure, depends upon the zeal and assiduity with which the subject is pursued by those who are interested.

If any one is doubtful as to the practicability of effecting so great an undertaking as that before us, we would call his attention to what has been accomplished by individual enterprise and perseverance. If it should be desired, we can confine our notice of the success of personal exertion, to men in our own profession.

If we cast our eyes upon the historic page of medical science in Europe, we shall there notice the brilliant achievements of individual effort. The elder Monro by his splendid talents and industry, happily established the celebrated medical school of Edinburgh: the success, if not the origin of the London school of medicine, is to be attributed to the zeal and perseverance of the Hunters: and Boerhaave may be considered the father of the great university of Leyden.

More might be said concerning the vast achievements of men abroad. But leaving Trans-Atlantic talent and enterprise, let us examine the origin of some of the medical institutions in our own country. Dr. John Warren of Boston, conceived and furnished a plan for a medical school connected with Harvard college, and owing to his talents and exertions, the several professorships were filled, and the institution soon put into successful operation. We may also notice the amazing labours of the late Dr. Nathan Smith in founding, and actually representing in his own person the whole corps of professorships, for twelve successive years in the medical department of Dartmouth college. He was also eminently instrumental in raising the character of several other medical institutions in New-England. Again, Dr. Wm. Shippen of Philadelphia is entitled to the honor of founding the most distinguished medical institution in America. He gave his first course of lectures on Anatomy and Midwifery, to a class of ten students.

We might carry this subject still farther, and notice the more modern medical institutions, and their living founders; but I trust enough has already been shown, to prove what has been, and what can be accomplished by the exertions of individuals. If in reply to this statement it is said that these men, or most of them, were possessed of pre-eminent talents, learning, and genius, and that their ability to accomplish great undertakings was far above that of ordinary men, we will cheerfully grant it to be true.— But let the efforts of twelve or fifteen men of medium talents and acquirements be concentrated, let there be a perfect co-operation in their power and influence, and we will see how much the sum of their forces will exceed that of any individual, however distinguished.

Gentlemen:— I cannot conclude, without expressing the (I trust well-grounded) hope, that the efforts now making by the friends of knowledge and benevolence, will be continued, and rewarded with success, that ere long, our city will be able to boast of a well conducted Medical College and Hospital, institutions favorable alike to the interests of Science and of Humanity.

It has been suggested that it might be expedient to connect with the Hospital, an Asylum for the Insane, which seems at present to be quite a desideratum in this part of the state.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.
COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.
BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF MAY, 1921.

Tuberculosis	14	Bright's Disease	9
Typhoid Fever	0	Apoplexy	21
Diphtheria	2	Cancer	17
Scarlet Fever	0	Accidents and Violence	6
Whooping Cough	0	Deaths under 1 year	15
Measles	0	Deaths over 70 years	52
Diarrheal Diseases	2	Death rate (non-residents included)	17.60
Pneumonia	3		
Broncho Pneumonia	5	Death rate (non-residents excluded)	14.53
Influenza	2		
Grippe	0		

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Albany Hospital	14	11	Maternity Hospital	0	4
St. Peter's Hospital	2	11	Tuberculosis Camp (Albany Hospital)	2	3
Albany County Hospital	1	1	Public Places	1	3
Homeopathic Hospital	4	9			
Child's Hospital	1	1		27	45
St. Margaret's Home	0	1			
Home for the Aged	2	0	Births		182
Convent of Sacred Heart	0	1	Still Births		3

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	1	Whooping-cough	20
Scarlet Fever	14	Tuberculosis	22
Diphtheria and Croup	19	Mumps	1
Chickenpox	46	Pneumonia	17
Smallpox	0	Influenza	4
Measles	124		
German Measles	0	Total	268

Number of days quarantine for scarlet fever:
Longest .... 37 Shortest 30
Number of days quarantine for diphtheria:
Longest .... 33 Shortest 12
Fumigations:
Rooms .... 75 Buildings 21
Milk bottles disinfected 914

Communicable Diseases in Relation to Schools.

	Reported D.	 S.F.	 M.
Public School No. 1	1	..	1
Public School No. 2	..	..	9
Public School No. 3	..	..	8
Public School No. 4	..	..	3
Public School No. 7	2	3	3
Public School No. 10	..	..	11
Public School No. 11	..	..	1
Public School No. 15	..	..	2
Public School No. 16	..	..	2
Public School No. 17	..	..	1
Public School No. 18	..	..	4
Public School No. 20	..	..	2
Public School No. 21	..	..	15
Public School No. 22	..	..	9
Public School No. 24	1	..	1
Albany Orphan Asylum	..	5	..
Albany Boys' Academy	..	..	2
Cathedral School	..	..	2
St. Agnes School	..		1
St. Ann's School	..	..	1
St. Joseph's School	2	4	1
St. Mary's School	..	1	..
St. Patrick's Institute	..	..	1

MISCELLANEOUS.

Cards posted for communicable disease	120	Vaccination dressings	293
Cards removed	123	Children examined for employment certificates	20
Notices served on schools	224	Number of employment certificates issued	19
Notices served on stores and factories	16	Taking specimens of blood for Wassermanns	0
Postal card returns sent to doctors	120	Taking smears for Gonococci	0
Postal card returns received from doctors	123	Cultures	8
Inspections and reinspections	137	Postal cards sent to milk dealers	41
Vaccinations	67	Inspections, midwives	0

Tuberculosis.

Living cases on record May 1, 1921		564
Cases reported:		
By card	15	
Dead cases by certificate	7	22
		586

Dead cases previously reported	7	
Dead cases not previously reported	7	
Removed	3	
Died out of town	1	
Recovered	0	
Unaccounted for	0	18
Living cases on record June 1, 1921		568
Total tuberculosis death certificates		14
Non-resident deaths:		
Albany Hospital Camp	4	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	0	
City at large	0	4
Resident deaths		10

Visits to cases of tuberculosis	71
Visits to physicians	13
Miscellaneous visits	20

LABORATORY REPORT.

Diphtheria.

Initial Positive	24	Release Negative	120
Initial Negative	165	Unsatisfactory	15
Release Positive	55		
		Total	379

Sputum for Tuberculosis.

Positive	28	Unsatisfactory	0
Negative	169		
		Total	197

Widals.

Positive	0	Unsatisfactory	3
Negative	30		
		Total	33

Meningococcus.

Positive	0	Negative	0
		Total	0

Wassermann Tests.

Positive	48	Negative	218
		Total	266

Gonorrhoea Examinations.

Positive	25	Negative	46
		Total	71

Milk Analyses	215	Miscellaneous Examinations.	3
Water Analyses	1		
Pathological Examinations	0	Total Examinations	1,165

HEALTH PHYSICIANS' REPORT.

Cases assigned	45	Calls made	112

DIVISION OF SANITATION.

Complaints		115
Inspections		115
Plumbing	5	
Sanitary	110	
Reinspections		76
Plumbing	9	
Sanitary	67	
Garbage collected from 1st District bbls.		500
Garbage collected from 2nd District bbls.		375
Garbage collected from 3rd District bbls.		625
Garbage licenses issued		53
Licenses for ashes issued		65

HEARINGS.

Hearings	3	Cases heard	3

Class of Cases.

Chicken	1	Defective house gutter	1
Filthy premises	1		

Disposition of Cases.

Reinspections	3

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections		104
Old houses	50	
New houses	54	
Permits issued		48
Plumbing	46	
Building	2	
Plans submitted		32
Old buildings	5	
New buildings	27	
Houses tested		14
Smoke	0	
Blue or red	2	
Peppermint	0	
Water test	12	
Houses examined		33
Re-examined		60
Valid	23	
Without cause	10	
Violations		0
Plumbers' license plates issued		3

Report of Removal of Dead Animals.

Horses removed	11	Cats removed	2
Dogs removed	3		
		Total	16

8 boxes eggs removed.

Division of Markets and Milk.

Public market inspections	25	Milk depots inspected	36
Market inspections	84	Inspections of stores selling milk	14
Fish market inspections	8	Dairies inspected	39
Slaughter house inspections	1	Milk houses examined	39
Rendering establishment inspections	1	Milk cans inspected	257
Pork packing house inspections	5	Milk cans condemned	0
Hide house inspections	0	Complaints investigated	2
Cows examined	425	Milk dealers' permits issued	7
Cows quarantined	1	Milk condemned .... qts.	120
Cows rejected	12	Cows removed	1

Laboratory Work Done at Bureau

Lactometer readings	112	Fat tests	38
Temperature readings	112	Sediment tests	34

Medical News

The Albany Guild for Public Health Nursing—Statistics for June, 1921.—1. Number of new cases this month, 168. Classified economically, free, 43; bed cases, 9; prenatal, 16; dispensary soc. service, 0; tuberculosis (pos.), 12; tuberculosis (super.), 6; venereal social, 0; paid, 125; limited means, bed cases, 75; metropolitan, bed cases, 35; metropolitan, prenatal, 15; Western Union, 0. Cases carried over from last month, 610; bed cases, 114; prenatal cases, 42; dispensary soc. service, 0; tuberculosis (total), 365; venereal, 89; Western Union, 0. Classification of bed cases: Medical, 68; surgical, 6; obstetrical, 40; prenatal, 31; confinements, 38; maternity, 2; miscarriages, 3; number of babies born, 40.

2. *Visits for Nurses* (all departments), 1,956; for bed care, 1,189; prenatal instruction, 72; tuberculosis (sup. and instr.), 95; venereal dis. instr., 35; general soc. service, 56; for other purposes, 408; dispensary social, 34; supervision, 67.

3. *Source of Nursing Cases.*—Metro. agts., 32; doctors, 90; nurses, 2; dispensary, 0; family or friends, 19; other sources, 7.

4. *Disposition of Bed Cases.*—Discharged recovered, 82; discharged

improved, 29; discharged unimproved, 16; discharged dead, 4; discharged to other care, 23; carried, 100. Disposition of other cases: Prenatal: discharged to maternity care, 40; discharged to hospital, 2; discharged to other care, 3; carried, 44; dispensary social service: dis. dispensary care, 0; carried, 0; venereal: discharged cured, 1; discharged temporarily, 0; discharged to other care (non-ven.), 2; carried by dispensary, 47; carried under super., 40; carried under care at the House of Good Shepherd, 7. Tuberculosis: discharged dead, 0; discharged left town, 2; discharged not T. B., 0; carried (positive), 374; carried (supervision), 0. Total number of cases carried over into July, 612.

5. *South End Dispensary Report.*—Number of clinics, 92; surgical, 10; medical, 6; gynecological, 7; prenatal, 0; eye and ear, 17; venereal, 13; nerve, 3; nose and throat, 8; skin, 4; children, 10; lung, 1; children's lung (observation clinic), 4; clinics with doctor attending, 83; clinics without, 9; number of new patients treated, 117; old, 716; total, 833.

(Signed) ANN E. MURRAY, *Superintendent.*

NATIONAL HEALTH LEGISLATION.—Bi-weekly summaries of national legislation concerning public health have been issued by the National Health Council since last March, when Congress convened in special session. These summaries list and abstract all new health legislation and also report progress on bills previously outlined. The first eight statements, covering the period from March 4th to July 7th, 1921, have listed about 80 bills, dealing with some phase of public health. Forty-four of these have been discussed at length and their progress carefully followed.

The reports, which are mimeographed and average about twelve pages, were intended primarily for members of the Council. The demand for them from non-members has been so great, however, that arrangements have been made to distribute copies at twenty cents a piece, which about covers the cost of production. Since it is problematical how long the special session of Congress will last, no definite subscription price can be set for the term. With the opening of the regular session of Congress in December, it is hoped that these reports can be printed, instead of mimeographed, and a subscription price set. These legislative summaries are prepared in the Washington Office of the National Health Council, 411 Eighteenth Street, N. W., Washington, D. C., and can be secured by addressing that office. A limited supply of back numbers, covering the current session of Congress is also available.

STATE LAWS CONCERNING CHILDREN.—In view of the number of States in which children's code commissioners are at work, the U. S. Public Health Service calls attention to a recent report by the National Child Health Council, which recommends certain provisions that are apt to be overlooked.

Most important of all it urges that all restrictions on local expenditures for the health of mothers and children should be repealed and that definite facilities for the education of prospective mothers, their protection in industry, and the supervision of their health should definitely be authorized.

The State health department should be authorized to license and supervise all midwives and to require the immediate reporting of all inflammatory conditions of the eyes of the new born and their proper treatment. Births, including still-births, should be promptly reported to local registrars under the health department. All maternity homes should be licensed and supervised.

Supervised pasteurization of all uncertified milk and its proper handling, etc., should be required.

Health education should be provided for all school children. It should not prescribe rigid or uniform drill or instruction, but should normally stimulate the child's physical development and should include practical intruction in personal hygiene, nutrition, and sanitation. Teachers should be instructed in the fundamental principles of health education. Periodic physical examinations should be made. Special groups who are unable to receive class instruction should not be forgotten. The sanitary condition of school buildings and grounds and their environment should be supervised.

The child in industry should be physically examined when he leaves school, when he changes his work, and periodically while he is of school age.

Each State should have a bureau of child hygiene, which should administer the laws for children. All public and private institutions having to do with children should be subject to regulation by the health authorities. All appropriations for child or maternity care should specifically provide for health.

Child Hygiene Work of General Interest.—A report on a year's work in child hygiene carried on by C. P. Knight, of the U. S. Public Health Service in cooperation with the State Board of Health of Missouri, and with all private associations interested in the work, shows results of much general interest.

In sundry cities a house-to-house canvass was made to determine the percentage of birth registration, the sanitary condition of the home, the amount of milk used, the relative income, and the relation between prenatal influence and infant mortality. The parents were greatly interested in the work and helped unhesitatingly. Better health supervision of young children and the correction of much improper eating and sleeping habits resulted.

In other cities school hygiene was begun by weighing and measuring the children. The results stirred up a friendly rivalry among the children to see which could first reach the proper average. Many mothers attended talks given to parent-teacher associations, and learned that when a child was under weight (7 to 10 per cent below average) and did not gain as he should (half a pound a month between 8 and 12 years of age), it was probably due to some physical defect or to faulty living.

With the mother's consent underweight children were examined physically; and both child and mother were questioned in each other's presence. Many physical defects and faults, such as late bed time and improper eating were disclosed. Suggestions as to how the troubles might be rectified were followed up by a public health nurse, who visited the homes and urged the remediable measures. Everywhere both parents and physicians warmly cooperated in the work.

Rural school surveys showed that though the country child had the advantage of fresh air and out-door life he usually sleeps with closed windows and subsists, especially in fall and winter, on pork, hot biscuits, gravy, and sorghum. In the summer he has home-grown vegetables. Adenoids and decayed teeth pass unnoticed or are neglected because of lack of facilities.

Demands from many parents that their children be weighed and measured led to the opening of numerous child health centers, to which clinics for teeth, eye, orthopedic defects were added. A community nurse began classes for mothers and expectant mothers, teaching them to care for themselves and for their babies. Follow-up work included monthly letters to expectant mothers and, later, a similar series on the care of the baby. By this means interest in birth registration was aroused and data obtained for supplying it.

Mental Defects in School Children.—"The prevention and correction of mental defectiveness," says the U. S. Public Health Service, "is one of the great public health problems of today. Its influence is continually cropping out. For instance, recent studies have shown that feeble-mindedness is an important factor in prostitution, and that a marked proportion of juvenile delinquency is traceable to some degree of mental deficiency in the offender:

"A recent state-wide survey in Oregon shows that more than 75,000 men, women, and children out of a total population of 783,000 are dependents, delinquents, or feeble-minded, and that more than 500 school children out of a total enrolled school population of 32,500 are more or less mentally deficient. The latter fact is significant when it is remembered that the condition of the children of today is the best possible index to the condition of the community of tomorrow.

"The Oregon figures are considerably lower than the average shown by the draft examination, indicating that they are certainly not higher than those that would be obtained in other States."

Missionary Physicians Needed.—Twenty-three years ago for the first time in the long history of China, a hospital for insane was opened in that land, by John G. Kerr, M. D., LL. D., in Canton, where many years earlier foreign medical work had had its very beginning. More than forty years of his life had already been spent by Dr. Kerr in the ministry of healing as a medical missionary connected with the Presbyterian Church, North. Being seventy-three years of age when he took up this new work, he was obliged after three years to lay it down. But this time was long enough to see the enterprise which he had long wished to inaugurate a growing institution.

Its reason for existence was to extend an asylum and treatment to Chinese insane, and to give to the recovered patients and their visiting friends as well as to the helpers and neighbors, by word and by life, an opportunity to hear and see the Christian Gospel of salvation and service.

The hospital has now a population of more than one hundred, and it would have been much larger had land and buildings been available for all for whom admission has been sought.

With the exception of Mrs. Kerr, in charge of the evangelistic work, and two American physicians, the staff and helpers are all Chinese. Another American physician is needed. Few are offering their services for foreign mission work and few have made psychiatry or mental diseases their specialty. Thus far, no man with all the proper qualifications has been found to answer the call. The Presbyterian Board asks, is there not some physician in the United States with a desire to help give the Gospel to the people of China, a physician having a knowledge of psychiatry, and who is not above thirty-five years of age, who will volunteer for this service? If this call reaches some Christian physician even without a knowledge of psychiatry but willing to spend a year or two in special preparation for practice among the insane, the Presbyterian Board will be glad to get in touch with him. It is not at all necessary that he be a Presbyterian.

Three Types of Vitamines.—According to a statement by Dr. Carl O. Johns, in charge of nutrition work in the Bureau of Chemistry, U. S. Department of Agriculture, vitamines have been classified into three different types depending upon the functions which they have in promoting well-being and growth.

The first type is known as water-soluble vitamines, and these are necessary in order to obtain growth from food. Lack of these causes beriberi, which manifests itself by disease of the nervous system and by other symptoms. These vitamines are found in seeds, in green plants, in certain bulbs and fleshy roots and fruits, and in milk and eggs, as well as in certain organs in the animal body. The seeds referred to include beans, nuts and the various cereal grains. When cereals are very highly milled in order to obtain a very fine white flour, a large part of the vitamines may be removed. Vitamines are also lost when rice is polished in order to remove the outer layers which contain most of the vitamines. It is for this reason that a diet consisting mainly of polished rice may cause beri-beri, while unpolished rice does not cause this disease.

The second type is known as fat-soluble vitamines, and these are found in butter, eggs, milk, and in certain animal organs such as the heart, kidneys, and liver, and to some extent in other fats as well as in green vegetables. They also exist in smaller quantities in certain seeds. When fat-soluble vitamines are absent from the diet animals and man are subject to a disease of the eyes, which appears to be related to xerophthalmia and which, if prolonged, may produce blindness.

The third type is known as antiscorbutic vitamines—that is, those which prevent scurvy, which manifests itself by disease of the bones as well as in other ways. These vitamines are found in oranges, grapefruit, lemons and other citrus fruits, and in green vegetables such as tomatoes, spinach, and lettuce, and in eggs and raw milk. The drying of vegetables frequently destroys the activity of the antiscorbutic vitamines. The best source of vitamines is in the leafy parts of vegetables, and this is one of the reasons why spinach, lettuce, and cabbage are valuable foods.

ELIMINATE UNDERNOURISHMENT WITH MILK.—The story of a nationwide effort to eliminate undernourishment in growing children is told in the scrapbook of a milk specialist from the United States Department of Agriculture who has co-operated during the past two years in more than 40 milk campaigns held in cities and rural districts throughout the United States. All of these campaigns have been held in the interest of better health for children, and in every case where a milk campaign has been put on there has been an increase in the consumption of milk, which has amounted to as much as 30 per cent in some cities. What this means to the health of the country is hard to measure, for milk campaigns put on in one city have resulted in more campaigns in neighboring cities and rural districts, and the milk week has grown into a lengthy education on the food value of milk.

Movement Spreads Rapidly.—The milk campaign week was started in Connecticut in 1918, when six cities, the first of which were Hartford and New Haven, organized to combat undernourishment among their school children. The movement spread to Rhode Island, where Newport took up the work, and this campaign was followed in rapid succession bby campaigns in four New Jersey cities. Boston then went a step further, and put on a 12-months campaign. Among other cities which have taken up the work are Detroit, Pittsburgh, Kansas City, Topeka, Davenport, Iowa City, Akron, Spokane, Seattle, and Madison. Other cities have planned campaigns; and Iowa and Kansas put on a statewide campaign for two years, with splendid results.

Shows Necessity for Milk.—What is behind this great interest in milk?

Undernourishment. There are many children that are underweight and undernourished. A survey of 10,000 Chicago school children showed that 40 per cent were 7 per cent underweight, and the investigators were surprised to find that of those underweight, 57 per cent were from comfortable homes in the residential section, and only 16.2 per cent were from the stockyards district. "This fact," says the milk utilization specialist, "demonstrates the necessity for teaching more about the value of foods, for the fault here was not poverty but ignorance of the necessity of certain foods for growing children."

A survey conducted in New York showed that from 1914 to 1917 the percentage of undernourishment had increased from 5 to 21 per cent., and had accompanied a decrease of 25 per cent. in milk consumption.

Undernourishment is not confined to the cities. In one of the counties in the richest agricultural section of Kansas it was found that of 639 children in 30 school districts, 140 were at least 10 per cent. underweight, and only 42 per cent. of them used milk every day. Also, in three townships in Iowa 51 per cent. of the children were underweight.

Conditions Must Be Right.—"From figures like these a city may gauge the necessity of a milk campaign," says the milk specialist. "A campaign is never conducted by the Dairy Division of the United States Department of Agriculture unless there is a local feeling that it is needed. It is then made certain that the milk is pure and wholesome, that the supply is adequate, and the price reasonable to the producer, the distributor, and the consumer. In such campaigns the Dairy Division cooperates always with the State agricultural college, and the college gets the co-operation of the local agencies."

"Two important reasons for undernourishment in children are poverty and lack of understanding of the nourishing properties of certain foods. What milk campaigns do to teach the value of milk for the growing child is that much added to the general progress of child welfare."

Value of Milk in the Diet.—The value of milk in the diet has been shown very strikingly in the milk-feeding demonstrations carried on in the schools. In Kansas City, for instance, a survey in a certain school district in May, 1919, disclosed that 37 per cent. of the children were undernourished. They were given a school lunch of milk and graham crackers, and by September, the percentage of undernutrition had fallen to 25 per cent. The following March only 3.7 per cent. were below weight, and it was expected that all would be brought up to normal in a short time. Similar results have been obtained in other cities.

The value of milk for older children and grown-up is brought out in a tribute to milk from the president of a woman's college in the South: "For 67 years we have never had a death of a boarding school student. We have our own herd of dairy cows. What milk we can not use we sell. We went through the flu epidemic safely by keeping the dormitories heated evenly, and then feeding milk."

A Monument to the Late Dr. Magnan.—A group of former pupils, friends and colleagues of the greatly regretted Dr. V. Magnan, formerly president of the Academy of Medicine of Paris, physician-in-chief of the admission service of the mental clinic of St. Anne Asylum, propose to erect to him a monument, recalling his long life of devotion to the sick, of teaching, his labors, and the influence which he exercised upon French mental medicine. The committee intends to begin the construction of this monument at the St. Anne Asylum next May, on the occasion of the celebration of the centenary of the discovery of general paralysis by Bayle, thus uniting in the same tribute the School of Charenton and the School of St. Anne, of which Magnan was the uncontested chief. An appeal is made to American physicians to associate themselves with this work. Every subscription of forty francs will give the right to a commemorative plaque representing the monument.

Died.—Dr. Frank A. Palmer (A. M. C., 1882) died at his home in Mechanicville, N. Y., June 1, 1921, aged 62 years.

Current Medical Literature

REVIEWS AND NOTICES OF BOOKS.

The Principles of Immunology. By Howard T. Karsner, M. D., Professor of Pathology, Western Reserve University, Cleveland, and Enrique E. Ecker, Ph. D., Instructor in Immunology, Western Reserve University, Cleveland. Illustrated. J. B. Lippincott and Company, 1921. Philadelphia and London.

This book presents in three hundred and three pages, in a most interesting and concise manner the fundamental principles of immunology. The authors have made available in this volume, to the physician and to the student of medicine, the fruit of many years of critical labor in a field where the literature is so extensive, that none but the special worker could hope to digest and successfully correlate the many publications bearing on the subject. Although the scope of the book has been limited to fundamental principles, the volume contains in sufficient detail an illuminating discussion of the facts and theories pertaining to resistance of infection. The manner of presentation is admirable. In each chapter the experimental evidence for established facts is given, and this is followed by a discussion of the significance and relation of these facts to disease and resistance in man. No claim for originality is made, as the authors acknowledge that they have drawn freely on the general literature and the more comprehensive works in this special field, but warm praise should be accorded them for the interesting and stimulating manner in which the material is arranged. There are a few simple but accurate illustrations showing various points in laboratory technic. The three appendices contain information which will be especially helpful to the practicing physician, as here the authors discuss the practical bearing of the foregoing to the prevention and cure of disease. A discussion of the applications and the limitations of the various types of blood sera, prophylactic vaccination and vaccine therapy is given. This has been added to point out the fundamental scientific basis of these methods, rather than to serve as a guide for their administration. L. W. G.

NEUROLOGY.

The Treatment of Neurosyphilis by Intraspinal Route.

KEIDEL AND MOORE. *Bulletin of the Johns Hopkins Hospital*, 1920, XXXI, 404.

Swift suggested in 1915 that local irritation might increase the permeability of the meninges after the use of intraspinal arsphenaminized serum treatment of neurosyphilis. Keidel and Moore have made a clinical investigation of 25 patients using intraspinal mercurialized serum followed within 24 hours by an intravenous injection of arsphenamine. Mercurialized serum was chosen because of its irritating effects. The cases observed were those that would not or had not improved under routine intravenous treatment alone. Clinical results were good in 60% of the cases but serological results were poor in practically all groups treated. When the authors compared their results with other workers they concluded that the method was unsuccessful and that the aseptic meningitis produced by intraspinal injections might prove an untoward instead of a beneficial factor in the treatment of neurosyphilis. The authors also express their belief that intraspinal therapy is a necessary and rational adjunct in the treatment of neurosyphilis in cases which fail to respond to routine antisyphilitic treatment.

HENRY VIETS.

The Cells of the Arachnoid.

WEED. *Bulletin of the Johns Hopkins Hospital*, 1920, XXXI, 342.

Weed has studied the arachnoid membranes in a series of cats, chosen with particular reference to the age of the animal. His conclusions are as follows: The arachnoid mesothelial cells are normally of a low flat type but their morphology depend upon the particular physiological state of the cells at the time of examination. Under the stimulus of particulate matter and in acute infections the cells increase in size, become phagocytic, and at times form free-moving macrophages. Other changes in the growth of the arachnoid cells lead to almost the invariable formation, in the older animals, of cell-clusters —slowly progressive growths at times under going calcifications and less frequently seemingly related to the formation of endotheliomata.

HENRY VIETS.

The Type Cell of the So-Called Dural Endothelioma.

MALLORY. *Journal of Medical Research,* 1920, XLI, 349.

Mallory thinks there is no dural endothelioma and hence no dural endotheliomata. The arachnoid comes from mesenchyma and first appears as a single layer of cells but soon thickens to two to five cells. On its outer surface are formed a layer of endothelial-like cells which really are undifferentiated but potential fibroblasts on which the future growth and thickening of the arachnoid depends. These cells multiply and form whorls sometimes containing dural fibroblasts with elastic fibrals. Buds of proliferating arachnoid cells may invade the dura and form arachnoid villi. These growing cells may give rise to tumors,—dural endothelioma, psammoma, fibroma, fibrosarcoma. The best term for the entire group would seem to be " arachnoid fibroblastoma." They derive their blood vessels and connective tissue of its stroma from the dura. Another tumor closely related to the arachnoid fibroblastoma arises from the perineurium and is known as neurofibroma, false neuroma, fibroma molluscum, and von Recklinghausen's disease. Mallory thinks these might be called " perineural fibroblastoma." The common tumor of the nervus acusticus and of other central nerves is a perineural fibroblastoma. The paper is fully illustrated by photomicrographs.

HENRY VIETS.

Twelve Cases of Thrombosis of the Cavernous Sinus.

CHISOLM AND WATKINS. *Archives of Surgery,* 1920, I, 483

These authors found only 8 cases of this rare disease in 50,000 surgical records of the Johns Hopkins Hospital. These cases with 4 others are reported in detail, many illustrated by photographs. The infecting organism was either staphylococcus or pneumococcus in 75% of the cases. 11 cases died; none were operated upon. Meningitis was a complication in 10 out of 12 cases. Blood cultures were positive in 5 cases. As basilar meningitis and a thrombosis of the neighboring venous sinuses usually occurs early in the course of the disease, operation is rarely successful. Drainage of the sinus in the presence of meningitis is inadequate; without meningitis the patient has a chance for recovery without operation.

HENRY VIETS.

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MANIA TRANSITORIA AND EPILEPTIFORM MIGRAINE.

A Contribution to the Dedication of the George Alder Blumer Research Laboratory of the Utica State Hospital, Utica, N. Y., June 4, 1921.

(Reprinted from the State Hospitals Bulletin, August, 1921.)

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INSCRIBED TO
GEORGE ALDER BLUMER, M. D.

Thirty-five years ago the writer began his professional studies in the Utica State Hospital as the disciple of Dr. Blumer. For thirty-five years this relation of preceptor and pupil has been maintained with what degree of advantage to the latter is attested by the honor of participation in the exercises of this occasion. His estimate of the qualities of his life-long guide is the bard's appraisal of the Welsh chieftain:

In faith he is a worthy gentleman;
Exceedingly well read, and profited
In strange concealments, valiant as a lion,
And wondrous affable; and as bountiful
As mines of India.

His regret upon the Master's retirement from the exactions of a high and arduous calling while there is no diminution of the riches and brilliance of a gifted mind mingles with the pleasant vision of tranquillity and felicity of declining years, fulfilling St. Bernard's promise of reward of a life dedicated to the service of others:

PAX SINE CRIMINE, PAX SINE TURBINE, PAX SINE RIXA.

In the literature of not so long ago there cropped up occasionally the phrase "Mania Transitoria," which was applied to cases characterized by a sudden and brief outbreak of mental excitement and violence. The term itself was, perhaps, not quite so restrictive as "instantaneous insanity," proposed by Castelnau,[1] but was intended to describe an individual in whom perfect health is suddenly and temporarily interrupted by an attack of insanity. In fact, the definition with which Dr. Jarvis[2] introduced his review of the subject limited the condition to "a form of mental disorder which suddenly appears in persons previously sound, or not supposed to be unsound, in mind: it has a short duration and suddenly disappears."

There were many, of course, opposed to this doctrine of sudden transition from health to violent insanity, as not consistent with ideas of human stability, and they were met by the proponents with the presumptive proof afforded by the presentation of actual instances.

The inquiry may easily cover the whole range of human conduct, for any demonstration of activity may be conceived between quiet and orderly demeanor on the one hand and frenzy on the other. The indistinct boundary between normal and pathological acts is further obscured by the determining factor of individual character which accepts as normal in one person a manifestation which may be decidedly abnormal in another. It is noteworthy, for example, that in the contribution of Dr. Jarvis, postulated upon a fairly exact definition, the cases which he cites from the literature were largely instances of sudden attacks of violence during the course of insanity, or epilepsy, or some other disease, and that many others appeared to arise from imperfect control of the passions, or among criminal types for which an explanation might be found in constitutional moral defect. Indeed, in a search of the literature it is difficult to find a satisfactory instance in which there was not some reasonably definite physical or mental cause of the outbreak. Dr. Sleman[3] reports a case of this ephemeral type, in which a healthy man of sixty, after a walk of six miles in the evening, fainted and fell upon his arrival at home and, after having been placed in bed, attempted to procure his revolver from the drawer in a chest in his room. He was prevented after a violent struggle. After a sleep of a few hours he awoke with no recollection of what had taken place. Search into his antecedent history gave no evidence of alcoholism, epilepsy or any previous illness, and at the time of the report there had been no repetition of the attack. This seems a fairly typical case, though there was ample suggestion of acute physical exhaustion or collapse.

Dr. Diller[4] makes a similar observation. His patient had had an attack of influenza, took a long walk on a warm day, fortified by a glass of whiskey and a glass of beer, sprang upon his mother in the height of maniacal frenzy, doing injuries which caused her death. He was said to have had no recollection of the assault and never again to have suffered an attack of similar nature. Dr. Bell[5] observed another case in which insolation seems to have had a part, the attack being characterized by excitement and lapse of consciousness continuing for eighteen hours. Dr. Aldrich[6] reports two quiet cases of suspension of volition and cognition for brief periods. Dr. Burgess describes an episode in the case of a woman of forty who became frightened and bewildered, while traveling, developing a state of restlessness with attempts at self-mutilation, the whole attack lasting forty-eight hours; and another patient, an adolescent, who displayed symptoms of confusion and active hallucinations approximating a state of delirium.

Dr. Burgess[7] prefers the term ephemeral mania because of the absence of the blind desire of destruction attributed to the cases of so-called furor transitorius. With this reservation the occurrence of transitory periods of mental aberration may be assumed to be relatively frequent. Clouston[8] shrewdly comments upon these: "I imagine that family doctors who attend many nervous families could tell of attacks of what are really ephemeral mania, but are naturally called by all sorts of euphemisms,—'nervous attacks,' 'hysterical attacks,' and so forth."

Frei[9] collated the recorded cases of transitory mania which presented the following possible aetiology: epilepsy, hystero-epilepsy, anaemia, persistent alimentary disturbance, inanition, loss of sleep, lactation, haemorrhage, sexual excess, rapid growth, insolation, severe fever, including typhoid and puerperal fever, pulmonary and peritoneal tuberculosis, intestinal growths, pleurisy, tabes, alcoholism, salicylate poisoning, inception of menstruation, over-exertion and strong emotions.

Dr. Henry Hun[10] observed a case of belladonna poisoning in which a state of delirium, manifested by restlessness, tremor, confusion, clouding of consciousness and hallucinations persisted for about twelve hours. This is probably not an extraordinary occurrence. Various poisons, mental and physical shock, the puerperal state and cerebral concussion, frequently effect suspension of mental function, exhibited by stupor or delirium. These may be discarded from present consideration, to clear the way for study of states of sudden and violent frenzy which have been urged, not infrequently in courts of justice, as a form of insanity. The problem, thus circumscribed, resolves itself into an inquiry into the medico-legal relations of individuals who commit crimes during a transient state of supposedly uncontrollable or uncontrolled fury.

Vallon's[11] report upon "Transitory Insanity from the Forensic Point of View" presented the following group of mental disorders in which transitory periods of excitement may appear:

1. Transitory vesanias (mania, melancholia).
2. Pathological emotions.
3. Irresistible impulses.
4. Mental disorders of the puerperium and of menstruation.
5. Mental disorders incident upon intoxication.
6. Mental disorders associated with neuroses.
7. Mental disorders associated with affection of the central nervous organs or nerves.
8. Mental disorders associated with other diseases than those of the nervous system.
9. Mental disorders incident upon disorders of sleep.
10. Momentary passion.

Vallon doubted that a penalty for crime should be escaped upon the basis of transitory insanity of an individual whose examination and antecedents revealed nothing abnormal, and, in discussion, Charpentier[12] agreed that in practice the rule should be established that no such condition exists as transitory insanity without evident cause and predisposition, and that an alleged case of this kind is not within the acceptation of acknowledged psychopathologic states.

The impulse to kill, and to kill brutally and viciously, appears to have been the dominating symptom of the recorded attacks of this disorder. Dr. Jarvis[13] catalogued the literature existing at the date of his contribution, and it is a sad summary of inherent human viciousness:

A woman "threatens her father, beats her husband, strangles her children." (Esquirol.)

A teamster walking in front of his team "struck a woman several blows with his hatchet . . . split open the head of a boy . . . buried his hatchet in the skull of a man and spilled his brain on the highway . . . and said 'It was not I but my evil spirit that committed these murders.'" (Esquirol.)

"A man of sixty suddenly seized a hammer and struck a child on the head with it." (Bucknill and Tuke.)

"A man in a hospital seized a bludgeon and struck a deadly blow on the head of an inoffensive female." (Woodward.)

"Henrietta Cornier cut off a child's head and threw it into the street." (Esquirol.)

A man struck his wife a fatal blow with an andiron (Woodward), and another used a billet of wood with the same deadly effect (*Ibid*).

"A woman killed her child, stabbing it twenty-one times with scissors." (Esquirol.)

In many cases it is well established that there is loss of consciousness during the paroxysm, and in these the clinical picture of an automatic mechanism, represented by an impulse to homicide, may be regarded as temporary disintegration of personality. This suggests epilepsy, the usual origin of unconscious automatism, sometimes imitated in somnambulism, alcoholism, blows upon the head and other sources of temporary commotion or concussion of the brain. There are also undoubted instances of anger, fear or other extreme passion in which impulsive and automatic acts are performed without the knowledge of the patient.

There seem to be two characteristics of these crimes: first, the excessive and unnecessary violence and mutilation of the victims; and, secondly, the apparent indifference and lack of repentance of the perpetrator. Dr. Jarvis cites the "excess of destructiveness in the insane," and Dr. Ray[14] makes the distinction between the criminal who "never sheds more blood than is necessary for the attainment of his object, whereas the homicidal maniac often sacrifices all within reach of his murderous propensity." Bucknill and Tuke[15] lend the weight of their authority to this differentiation: "Frequently it is observable that the homicidal maniac sets no bounds to the destruction of his victims, a contrast to the ordinary criminal, who does not kill more than his object renders necessary." With reference to the conduct of the offender the last named writers acknowledge the "utmost *sang froid*" exhibited by the homicidal maniac; Dr. Jarvis recognizes the absence of remorse and of the "bitterness of self-condemnation;" and Dr. Ray says that "the homicidal maniac, after gratifying his bloody desires, testifies neither remorse, nor repentance nor satisfaction."

Gall,[16] on the other hand, quotes the case of an insane woman who drowned her little son: "She behaved in the most regular manner, expressed the deepest repentance for the act, but did not consider it a crime." With this may be cited the personal observation[17] of a young epileptic woman subject to outbreaks of great violence of homicidal character who "requested that she be removed from others during the seizures in order that she may inflict no injury, which she afterwards always regrets."

In the determination of responsibility, stoical demeanor as an indication of disease is an unsafe guide, and is to be accepted as of pathological origin with great caution.

This attribute is too common and too often typical of inherent character, not infrequently, it must be confessed, of bad character. The habitual criminal who deliberately enters upon his anti-social career is usually complacent when facing the penalties of his evil-doing, and repentance among those in confinement is much less frequent than buoyancy and expectation of resumption of their nefarious practices. Callousness of conscience such as is described in reports of cases of transitory mania carries in itself the suggestion of that type of human being which the world accepts as the criminal type, and much stronger evidence must be presented to overcome the reluctance with which medical or legal authority receives the theory of momentary incidence of disease in an otherwise normal individual. Asseveration of true "instantaneous insanity" may be carried, indeed, to ludicrous results, as in the case of a homicide in which a physician sustained his contention on cross-examination by testifying that an attack of epilepsy supervened during the fatal shot, the third of four, and subsided before the last was fired.[18]

An analogous case is that of Pierce, on trial for the murder of Bullock, reported by Dr. Cook:[19]

> The facts in evidence, touching the mental condition of Pierce and the shooting of Bullock, are briefly as follows: No insanity was shown in the direct ancestral line of the prisoner, but in a collateral branch there was one maternal aunt who had been insane, and another aunt who had nervous "spells."
>
> No evidence was offered tending to show that he inherited an insane temperament. He was not eccentric or in anyway peculiar; on the contrary, he had a symmetrically developed character, and had won for himself a good name for integrity and capability. At the time of the homicide he had reached the age of twenty-eight years, with a mind well balanced and free from all indications or suspicion of insanity. His temperament was characterized as nervous by medical witnesses, as was also his mother's.
>
> He had an only sister to whom he was strongly attached. Wm. Bullock became the avowed lover of this sister and her promised husband. Such was the relation existing between these several parties early in March, 1871. At this time it was discovered by the parents of Hattie Pierce that she was soon to become a mother, and that Wm. Bullock was the father of the child. Young Pierce was sent for to come home, where he arrived on Wednesday, the eighth day of March. He was then for the first time informed of his sister's condition and on that day had an interview with Bullock. Pierce wanted Bullock to marry his sister immediately; Bullock wanted to postpone the marriage till after the birth of the child, keeping the whole affair secret, and disposing of the child in a clandestine manner. Pierce showed much grief, shed tears, was pale and agitated. They separated without coming to an arrange-

ment satisfactory to Pierce, and he left Lockport the same evening for Waterford, whither he went to arrange for his own marriage. This accomplished, he returned to Lockport the following Saturday, the eleventh day of March. On the afternoon of this day he is described as looking pale and agitated, and seemingly preoccupied with the condition of his sister—her ruin and the disgrace of the family. In the evening, at about nine o'clock, he again met Bullock and the conversation in regard to his sister was resumed. This interview was at the house of Pierce's father. There was no angry altercation, and no threats passed between them. Pierce appeared to feel keenly the shame and disgrace brought upon his sister, and urged Bullock to remove it, as far as it could be done, by immediate marriage. To this arrangement he failed to gain the assent of Bullock. Pallor, tears and agitation were again observed at this interview. At this time, it is shown that both Pierce and his sister had lost faith in Bullock's fidelity to his promise. Pierce and Bullock passed out of the house together. Pierce swears that, after speaking of some indifferent matter, he again referred to his sister, and that they continued the conversation until they reached the point where Bullock proposed to separate from him, when Pierce says he again asked Bullock if he would not marry his sister before her confinement, and Bullock replied, "I will see you in hell." At this point, the statements of Bullock and Pierce are conflicting. In Bullock's ante-mortem statement, no such words are given. Up to this time, the very moment before the homicide, there is no pretense that Pierce was insane. Pierce says that his last recollection was Bullock's expression, "I will see you in hell," till he found himself in the custody of a man he did not know. The facts are, that at this time, Pierce, without any threat or warning, drew a pistol and discharged it at Bullock. Bullock turned and ran, Pierce pursuing, and firing four more shots, the last just as Bullock fell to the pavement, and Pierce was secured by a policeman. All this occupied about four minutes. When told that he was a prisoner, he dropped his revolver, and said he would go with the officer. He was pale, but quiet and orderly. At about this time, or soon after, in reply to a question about his motive for the homicide, he said, "Wait, time will tell;" and a few hours afterward remarked to an officer that "He need not be mad at him for when he came to know the truth of the case he would not blame him." Pierce saw Bullock fall upon the pavement; saw him prostrate and bleeding at the station-house; but he asked no questions, he expressed no surprise, and at that time he exhibited no unconsciousness of the act he had just committed. There was no maniacal wildness, or disorder of ideas or conduct, either just before or just after the homicide, or while firing the fatal shots; no manifestation of delirium whatever. There was the homicidal act as above described; nothing more. His subsequent appearance and conduct in jail, up to the trial in October, evinced no mental disorder. This statement embraces all the essential facts in the case.

Dr. Cook describes the court room scene that followed the verdict of "not guilty!" "Men and women wept for joy. Men shouted and cheered. Women rushed forward over railings and chairs, and embraced and shook hands with the prisoner."

The peculiar significance lay in the obvious fact "that an American jury will not convict a man of murder for killing the seducer of his sister."

Upon the legal aspects of the case Dr. Cook makes no comment. "But the interposition of the plea of insanity, and the perversion of medical authorities and opinions in support thereof, I cannot regard otherwise than an outrage upon personal honor and scientific truth. It throws unjust suspicion upon the plea of insanity when legitimately offered, and reflects discredit upon the opinions of medical experts, so that courts and juries are disposed to give them little weight, except when they happen to accord with popular feeling or prejudice, or with their own convictions."

"Dr. Ray[20] remarks that, 'Of late years, it has become a common belief, in practice, at least, that under the moral shock supposed (the seduction of a sister, wife or daughter), the person, necessarily, loses all self-control, if not all proper perception of right and wrong, and is for the moment, in a state of insanity.' 'This,' he adds, 'is going too far.' Such is the recorded opinion of one of the best authorities on the legal relations of the insane, in this or any other country; and this 'going too far,' is just where the court, witnesses and jury went, on the trial of Aratus F. Pierce."

Krafft-Ebing[21] reports a case of attempted murder, incident upon marital infidelity, but, unlike Dr. Cook, discovered a state of pathological emotion (*pathologischer Affektzustand*). His patient had been neurotic for months, and for weeks was in a state of high mental tension, which, in the short period of time in which the act occurred, passed into complete bewilderment (*Sinnesverwirrung*). In another crime of violence in public (*Verbrechen der offentlichen Gewaltthätigkeit*) he discovered temperament, insolation and alcohol.

That anger or any other emotion or passion is not *per se* disease, cannot be too strongly emphasized. Dr. Ray[22] writes: "The misfortune which the criminal is going to avert, the interest which he is going to subserve, the revenge he is about to gratify, the insult he is about to repay, are *real* injuries and insults and interests, however much they may be exaggerated, or however disproportionately small they may be to the crime they provoke; and the ends to be obtained by the criminal act are real and have an appreciable value. In the most violent transports of passion, he never wholly loses his knowledge of the true relations of things. The person whom he considers his enemy, or the author of the insult, is really such, or at least, he has some ground for believing him such; and with the absence of the object of his passion, disappears the intention to offend. Violent passions may weaken the judgment, and diminish its power of control, but they do not vitiate the perceptions, nor deprive the mind of its powers of comparison."

Senseless and deformed,
Convulsive Anger storms at large, or *pale*
And *silent,* settles into fell revenge.

Chief Justice Chapman[23] (Massachusetts) in his charge to the jury in the Case of Andrews, on trial for the murder of Holmes, speaks forcibly upon this issue:

"To admit that such an hypothesis of irresponsibility is applicable to acts of sudden, abnormal violence, without proof of insanity before or after the act, is to emancipate violence and barbarism from penal restraint. . . . The principle of the law, that a person sane before and after a particular act, is to be presumed to be sane during such act, is a principle of common sense. Without it, none of the business of social intercourse of life could be sustained. . . . Insanity is to be distinguished from passion. One may become so far infuriated by passion, excited by words or blows or by a struggle, as to yield himself up blindly to its impulse, and not know what he does. But such passion is not insanity. One who does not control his passion is to blame, but an insane man is not to blame."*

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* The extraordinary and complicated "Trial of Samuel M. Andrews for the Murder of Cornelius Holmes" is reported in full by Dr. Edward Jarvis in the *American Journal of Insanity,* April, 1870.

Dr. Maudsley[24] thus tersely and epigrammatically concludes: "Possibly there may have been a sudden outbreak of insanity which ceased as suddenly as it came on, but unless there was strong evidence of it other than the crime, it would be proper to refuse to admit it."

Atrocious violence and stoicism are associated in epilepsy and suggest careful inquiry for other manifestations of this disease. William Comstock killed his parents with excess of fury and was lying near their bodies, tranquilly sleeping, when discovered. The hearts of his victims were found in the oven—half-roasted and half-gnawed.[25] The fratricide MacDonald passed into a paroxysm during the night preceding his trial and in great fury grasped a fellow-prisoner's throat and nearly strangled him before the keeper came to his assistance.[26]

Dr. Maudsley[27] says "Cases of insanity are occasionally observed in which an attack of mania suddenly comes on, and soon passes away, so that although there is no epileptic fit, one can scarce avoid looking upon the attack as a sort of epilepsy."

Bucknill and Tuke[28] believe that "the question of epilepsy is unquestionably a point of extreme importance. In doubtful instances careful inquiry should be made whether epileptic seizures, however slight and transient, have been observed. Some of the most dangerous homicidal lunatics, without delusion, are subject to attacks of epilepsy; they may be under the influence of destructive impulses only when a fit is threatened." Echeverria[29] insisted that search for stains upon the bedding, lacerated tongue, petechiae upon the face, neck and chest, dislocation and fracture, headache and drowsy intellect, is indispensable in the examination of any crime characterized by instantaneity, fierceness, brutality and unascertained motive.

It is, however, unnecessary at this time, to exploit the phenomena of epilepsy. It is accepted that the seizures are due to an unstable mechanism of the cerebral cortex revealed in sudden, violent, and repeated or paroxysmal explosions of nervous energy, and that the symptoms beyond the practically universal clouding or loss of consciousness are determined by the area of the cortex involved in the so-called "discharge." There may thus be motor epilepsies, sensory epilepsies and mental epilepsies. Larvated or masked epilepsy and epileptic automatism merely offer a convenient paraphrase descriptive of an attack lacking the usual convulsion, and this type presents symptoms sometimes characteristic of migraine. There are many points of contact, the resemblance is close and some observers see in epilepsy and migraine an expression of the same disease.

Féré[30] is among the number who contend for this identity. He says: "Among the phenomena which accompany modified epilepsy or alternate with it sensory migraine may be enumerated, particularly ophthalmic migraine, which may serve as a type, and which, for the sake of differentiation, constitutes a true sensory epilepsy with phenomena of exhaustion, hemianopsia and occasionally somnolence."

Féré reports several cases in support of his contention: one suffering from numerous attacks of migraine associated with fugacious palsies—transitory hemiplegia—resembling general paralysis; another with many motor and sensory symptoms; and two subject to serial attacks ending in a state of torpor.

The identity of migraine with epilepsy cannot be regarded as established, though the analogy is at times quite pronounced. Both diseases usually begin in childhood and are based upon an inherent or inherited defect or tendency. But there are differences. The inheritance is much more pronounced in migraine than in epilepsy, and is direct. A family history of migraine is determined in the majority of cases. No such preponderating transmission of a definite lesion is known in any other disease. The transmission of epilepsy is much less concrete, and the forebears of epileptics show a much wider variety of pathological conditions. Both diseases are the expression of functional perversion of the activities of the cerebral cortex, presenting similarities in their explosive character, their periodicity, and the variations in symptoms due to the different areas of the cortex involved. But the seat of predilection in epilepsy is motor, and that of migraine is sensory, though both involve mental functions; and there are occasional instances of transition so that both diseases appear in the same patient. Rupert and Wilson[31] speak of

"Psychical migraine, presenting a temporary loss of memory, temporary aphasias, hysterical spasm, garrulousness and melancholia."

"The hypothesis that the derangement is primarily one of nerve-cells of the brain enables us better to understand the relation [of migraine] to other neuroses, and especially that to epilepsy, which is occasionally so distinct. In epilepsy we must assume a disturbance of function, in some cases so similar in character that we cannot doubt the identity of its seat with that of migraine. But the process of the two differs in its course, associations and other features, and these imply an essential difference in its minuter characters. These relations, however, make it intelligible that the two should occur in the same subject, and that intermediate forms of nerve-disturbance should sometimes be met with."[32]

Löwenfeld[33] reports the case of a patient who suffered for a long time with migraine, and suddenly passed, one day, without warning, into a condition of mental aberration which lasted six hours and was characterized by slight confusion, sensory disturbance, clouding of consciousness and ensuing partial amnesia for the period of the attack. Löwenfeld believed this seizure to be analogous with the psychical equivalent of an epileptic attack and traced it to an atypical excursion of migrainous disorder of the cortex.

Zacher[34] reports a similar case and sustains Löwenfeld's contention that epilepsy and migraine are two similar and analogous conditions, in greatest probability related to each other.

Liveing[35] tabulates sixty-seven cases of migraine, in which "emotional and intellectual disorder" was noted in twenty-one. The mental disturbance included confusion and incoherence of ideas, impaired memory, terror, reckless indifference, depression and ill-humor, drowsiness, stupor approaching coma and complete incapacity. In some exceptional instances he believes "the whole paroxysm may be represented by one of transient insanity, or the malady itself may be replaced by a temporary mental derangement—in other words the neurosal disposition may show itself now under one of these forms and now another."

The mental possibilities of migraine have been collected by Jelliffe,[36] and include mild depression, hopelessness, despondency with clear consciousness and clouding of consciousness (Möbius); dysphrenias (Mingazzini); change in character, from modesty to agitation and salaciousness (Guidi); anxiety and anguish (Charcot); phobias (Cornu-Charcot); terror (Liveing, Féré, Krafft-Ebing); hallucinations of sight and hearing with mental confusion (Forli, Mingazzini); maniacal excitement (Mingazzini, Jelliffe), and stupor and unconsciousness (many observers).

Of the psychical complications of migraine attending malarial fever Macculloch[37] writes: "When the disease is strongly marked or the pain intense, the confusion of thought . . . frequently amounts to absolute delirium."

Seventy years ago Marshall Hall[38] deplored the ignorance of the seriousness of migraine: "Nothing is so common—nothing is viewed as of such trifling import—as the seizure termed 'sick-headache.' Yet I have known sick-headache issue in paroxysmal attacks of a very serious nature both apoplectic and epileptic. . . . How often would due attention to sick-headache and similar warning affections ward off the more formidable attacks of apoplexy or epilepsy—yes, and of mania!"

Krafft-Ebing[39] believes there can be no doubt that migraine is an affection of the cerebral cortex. Even if it should appear as a focal disturbance of function in sensory, mental and vagus centers, it may just as well be acknowledged that the local affection may occasionally become diffuse and produce symptoms of mental excitation or clouding. Not infrequently cases of migraine are seen in which the picture is not limited to headache with vomiting, but is complicated by flittering scotomata, hemiparæsthesia, motor and sensory aphasias, excitability of the functions of smell and taste, and even by agraphia, alexia, word-deafness and mind-blindness. He reports a case of migraine with automatism.

The Krafft-Ebing case was that of an apprentice, eighteen years of age, who was running frantically about the streets of Vienna, and appealed to an officer to protect him from men and ghosts who were following him.

On admission to the hospital he could only give his baptismal name, "August," and was very apprehensive and seriously disturbed in consciousness. He could give no correct replies to any simple questions. He wrote an incoherent note to his fiancée, although he could not express her name, and on the following day wrote a straightforward note to his mother, giving the correct address. For twenty-four hours he could give no information as to his antecedents, and could not place himself as to the occasion or as to his surroundings, and had no appreciation of the passing of time. Later there returned gradually some ability to recall a few incidents, but there still remained lack of comprehension of time and place, with partial word-deafness, mind-blindness and active hallucinations.

It was thought at the time that the clinical picture was that of a transitory psychosis, based upon a neurasthenic or epileptic predisposition. From information obtained later it appeared that as a child the patient had suffered from rickets and had also had convulsions; that his development had been tardy and that he did not walk until he was six years of age, although mentally he had proved a competent pupil in school and there had been no evidence of neurasthenic, epileptic or hysterical conditions. The history revealed, however, that since childhood he had suffered from periodic severe headaches, localized across the forehead and in both eyes, frequently associated with flittering scotomata. These attacks of migraine, however, disappeared as soon as he fell asleep, and were not usually accompanied by vomiting, paraesthesia or hemiopia.

For a year or two before the attack the patient had been employed as an apprentice in a hat factory. There were no unusual demands upon his energy, but he felt strange and fretted for a change, and on the day before the outspoken seizure of terror which carried him to the hospital the scotomata appeared as the forerunner of the attack of migraine, which persisted for thirty-six hours. The patient had never before been subjected to an experience of this character. The attack of migraine appears consequently to have been associated with, or replaced by, a transitory mental outbreak, analogous with attacks of the same general character which occur in neurasthenia, epilepsy and hysteria.

The scant clinical evidence of cases of this type includes a report by Dr. Bryce:[40]

The patient was admitted to the Alabama Insane Hospital on the 16th of October, 1886. He was thirty years old, of spare habit but apparently in good general health. His temperament was of a well marked nervous type. He never had epilepsy, and was strictly temperate in his habits. He was well educated, had agreeable manners, and bore in every respect the marks of a thorough gentleman. When admitted he seemed to be in a confused or stupid state of mind, refused to answer questions, and took no notice of what was going on about him. The next morning, after a good night's rest, he appeared perfectly rational and natural, and continued so until his discharge on the 8th of January, 1887.

On his restoration the patient gave the following additional facts of the history: "In August, 1886, I was afflicted with something like insanity. I was in the schoolroom teaching and suddenly became very wild. Ran across the room, opened my knife, and called to the students, 'Don't let him in, don't let him, he will kill me.' I had three other attacks in one week similar to the first, but not so bad. I did not try to hurt myself or any one else, and was easily controlled. These attacks lasted from three to five hours, during which time I was wholly unconscious. I quit teaching, rested awhile, and thought I was well. But at the end of two months I was again afflicted and tried to kill myself. This time I did not know anything for five hours. Four days afterward I had another attack which lasted three days and nights. When consciousness returned I was in the Alabama Insane Hospital. Did not know how or when I got there, who brought me, or anything that I did during the three days and nights spoken of. The first thing I knew after all these attacks was that my head was aching intensely which lasted for two or three hours. I have been subject to headache all my life. It is hereditary in my mother's family. This is a short history of my life. I cannot tell any difference in my mind now and twelve months ago more than my memory is not as good."

In the comments of Dr. Bryce upon his case he shows he had had very pronounced reluctance to accept the diagnosis prior to his own personal experience. He had received a circular communication from a physician inquiring about his experience in mania transitoria. This inquiry was based upon a case where this plea had been interposed in extenuation of crime, and responses were recorded from fifty superintendents of institutions for the insane, not one of whom had ever seen a case of mania transitoria. The purpose of the inquiry "was to show that no such disease as mania transitoria could possibly occur, and that the case of the prisoner, against whom the writer had testified as an expert, as well as all others in whose behalf such plea was interposed, were, in plain language, malingerers, and should be treated accordingly." Dr. Bryce apparently accepted the clinical evidence of the attack which he witnessed without fully analyzing the history which he subsequently received. Curiously enough, he regarded migraine as a casual episode rather than as the essential pathognomonic condition of which the maniacal outbreak was a symptom. The strong hereditary predisposition to migraine in this case is worthy of note.

Mingazzini[41] reports four cases of ophthalmic migraine showing, respectively, attacks terminating frequently in a stereotyped visual hallucination; hallucinations associated with anxiety; ocular phenomena resolving into suicidal impulse, and homicidal fury with retrograde amnesia. He agrees with Féré that the transitory psychic state, consecutive to migraine, suggests sensory epilepsy or partial epilepsy, and cites Meynert's tentative explanation of periodic insanity. His experience seems to demonstrate that a transitory psychopathic state, accompanied by complete or semi-complete amnesia, when associated with ophthalmic migraine, may be due to the intensity or the long duration of the attack, exceeding the ordinary limit; that is to say, that the cerebral vaso-motor disturbance may be more intense than common or may extend over a wider area. Under this hypothesis it is not necessary to assume a different cortical mechanism than that which causes migraine, if the attack is not due to epilepsy.

Spitzka[42] proclaims his faith in transitory mania in no uncertain voice and challenges the incredulous with characteristic vehemence, though he admits an etiology which includes heredity, excitable temperament, alcoholic excesses, physical exhaustion, violent emotion and mental strain, and confesses to a personal experience of only one case—*in which there was a history of migraine!*

My own experience is likewise confined to one patient who gave a very striking demonstration of automatism in migraine. This was Case No. 5524 of the Clinical Records of Pavilion F, the mental department of the Albany Hospital.

The patient, an artisan, twenty-one years of age, unmarried, was brought to the Albany Hospital by the police at half after eight o'clock on the evening of December 1, 1920. It was said that while calling upon friends in the city at half after seven o'clock he complained of headache, and about fifteen minutes later fell upon the floor and lay unconscious. The household responded and were about to assist him when he jumped up quickly, assumed a threatening attitude, undressed himself, sat upon a settee, and, as they approached, rushed at them viciously. He then walked about the room, feeling with his hands for the door and windows as if blind. The police were summoned and took him after a struggle to the hospital where he was received dressed in underclothing only and placed in bed. He sank into a state of coma, with moderate general muscular rigidity, and so remained through the night, except at midnight, when he vomited and dejected in bed.

On the following morning (December 2nd) he lay in bed with an appearance of profound stupor, and there was no response to any external stimulus, although his eyes were open; but when a finger was advanced rapidly toward the eyes there was no reflex closing of the lids, and the impression of blindness was still given. It was thought that the reaction of the pupils to light was present. There was a suggestion of cervical rigidity. The knee jerks were present. The pulse was regular, of good volume and force, and the rate was eighty-eight. There was nothing else of note about his physical condition.

An examination of the urine, the blood and the cerebrospinal fluid gave no indication of a pathological condition, and an examination of the ocular refraction made later by Dr. Bedell showed a moderate degree of astigmatism, and the ophthalmoscope revealed distinct discs and normal fundi.

During the general examination, while the patient was apparently in coma, he suddenly jumped from bed, and in an unsteady and indirect way walked toward the window. It was thought that he distinguished light, but he groped about the window-sill with his hands and over the wall below the window, finally discharging a large quantity of urine against the wall. He then groped his way back to bed again under some guidance. The episode was quite suggestive and characteristic of automatism.

On December 3rd vision returned, the patient accepted food and attention at the hands of the nurses, and in the evening began to answer questions with some appreciation. The improvement in his condition was progressive during the day, and on the morning of December 4th he was able to converse and to develop an understanding of his situation. He then recalled that he went home from his work at the railroad shops, changed his clothing and ate his supper. From that time on his mind was blank, although there was some faint appreciation of the presence of physicians and nurses on the preceding day. During the night of December 4th there was a short period when he stated that he saw shadows on the wall in the form of serpents, and that he also had double vision. Apart from this there was no interruption of the convalescence, which was sufficiently completed for him to leave the hospital on December 7th.

He then stated in amplification of his recollection that after taking supper at a boarding house he returned to his room for his overcoat, and, as it was raining, entered a street car but could not recollect leaving the street car or anything that followed. He had had an intense occipital headache for all that day, the first for a number of weeks. He had been subject to these headaches for many years, and they are sometimes so severe that he is obliged to leave the house at night and walk the street. The individual headache lasts a number of hours, and is generally relieved by defœcation.

The few remaining facts of the history are pieced together from the statements of the patient, his parents and the friends who have been associated with him during the few months before the attack. He had had the advantage of rural life in his boyhood, and had grown with rugged physical development except for the attacks of headache, which began early and were attended by digestive disturbance and occasional ocular symptoms. The peculiarity of these "sick headaches" was that they were occipital rather than lateral. Apart from these headaches he had never had any illness except that he was in a naval hospital in 1917 during an attack of influenza. He was discharged from the United States Navy in November, 1919, after service of two years, in which he had made several trips across the Atlantic in transports. In the summer of 1920 he found employment in the railroad yards in Albany as a mechanic and made some acquaintance in Albany from which arose the custom of the social calls on Wednesday evenings. It was thought by his hosts that he, at times, gave evidence of alcoholism, so that about ten days before the attack mentioned they declined to admit him to the house. The patient himself denies excesses of this kind, but admits occasional and insignificant use of alcohol.

To sum up: A young man who had suffered from severe attacks of migraine for the better part of his life, after an experience in the war, which may be assumed to have been more or less trying, incidental upon which was an attack of influenza, and after a change in environment involving occupation and surroundings of different character from any he had previously experienced, and after some possible indulgence in alcohol, passed suddenly into a state of violent mental excitement, during which he was unconscious for about forty-eight hours, and recovered without recollection of the events of this period. The character of the attack was undoubtedly epileptiform, particularly in its feature of automatism. It was a true instance of the psychic equivalent, but in the absence of preceding seizures of this kind a definite diagnosis of epilepsy was not warranted.

In the present state of knowledge there is no warrant for the assumption that epilepsy and migraine are symptomatic variations of the same disease. The best that can be said of the various theories upon the lesion is that there takes place a morbid functioning of the cerebral cortex incident upon inherent instability of that structure. Whether the disturbance affects the same area in different ways or different areas is a question for speculation. In the face of the frequent recoveries from both diseases there is little probability of an organic change, and the only evidence of a morbid process is that offered by the symptoms. Here there are distinctions, which have been most ably made by Gowers[43] in one of the classics of differential diagnosis. The alternations, premonitory symptoms, isolated prodromas, vertigo, pain, somnolence, delirium and elaboration are discussed with accuracy of detail and fineness of discrimination, characteristic of the observer, and leaves little room for doubt of the accuracy of his conclusions.

But there are points of contact, and among them is prominent the transient state of automatism, unconsciousness and maniacal frenzy which is frequent in epilepsy and occasional in migraine. This condition makes expedient the use of the term "epileptiform migraine," in which there are temporary disintegration of the personality and violent or even homicidal fury.

From this it is evident that migraine assumes juridical importance in the determination of responsibility in cases of vicious and otherwise unexplained crimes.

The inferences are: that

Mania transitoria is an episode in the course of other affections and does not in itself constitute a disease-entity; that

It is a condition characterized by excessive violence or frenzy frequently resulting in the commission of homicidal acts; that

Unconsciousness and automatism are the pathognomonic manifestations; that

These symptoms are most common in epilepsy and in conditions resembling epilepsy, and that

Among the diseases most nearly resembling epilepsy is migraine, of which there is an epileptiform type, presenting at times characteristic attacks of mania transitoria.

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Public Health

Edited by Arthur Sautter, M. D.

Department of Public Safety, Bureau of Health, Albany, N. Y.
Bureau of Vital Statistics.

Compiled by William F. Fullgraff, Registrar.
Deaths for the Month of June, 1921.

Tuberculosis	11	Bright's Disease	10
Typhoid Fever	0	Apoplexy	10
Diphtheria	1	Cancer	18
Scarlet Fever	0	Accidents and Violence	13
Whooping Cough	1	Deaths under 1 year	15
Measles	0	Deaths over 70 years	31
Diarrheal Diseases	0		
Pneuumonia	1	Death rate (non-residents included)	13.75
Broncho Pneumonia	3		
Influenza	0	Death rate (non-residents excluded)	11.00
Gripppe	0		

Deaths in Institutions.

	Non-res.	Res.
St. Peter's Hospital	1	5
Homeopathic Hospital	2	7
Albany Co. Hospital	1	0
Hospital for Incurables	1	0
Home for the Aged	0	1
Albany Hospital	15	14
Brady Maternity Home	0	6
Albany Hospital—Tuberculosis Camp	2	2
Public Places	2	2
	24	37

Births	188
Still Births	8

Division of Communicable Diseases.

Typhoid Fever	3	Whooping-cough	34
Scarlet Fever	15	Tuberculosis	25
Diphtheria and Croup	17	Mumps	4
Chickenpox	32	Pneumonia	18
Smallpox	0	Influenza	0
Measles	53		
German Measles	0	Total	201

Number of days quarantine for scarlet fever:				
Longest	30	Shortest	30	
Number of days quarantine for diphtheria:				
Longest	54	Shortest	11	
Fumigations:				
Rooms	69	Buildings	19	
Milk bottles disinfected				549

Communicable Diseases in Relation to Schools.

	Reported		
	D.	S.F.	M.
Public School No. 1	1	..	..
Public School No. 2	..	..	2
Public School No. 6	..	1	..
Public School No. 10	..	..	2
Public School No. 14	..	..	2
Public School No. 19	..	..	1
St. Joseph's School	..	1	..
St. Patrick's Institute	..	..	1

MISCELLANEOUS.

Cards posted for communicable disease	39
Cards removed	81
Notices served on schools	180
Notices served on stores and factories	14
Postal card returns sent to doctors	39
Postal card returns received from doctors	81
Inspections and reinspections	51
Vaccinations	12

Vaccination dressings	96
Children examined for employment certificates	101
Number of employment certificates issued	93
Taking specimens of blood for Wassermanns	2
Taking smears for Gonococci	1
Cultures	1
Postal cards sent to milk dealers	29

Tuberculosis.

Living cases on record June 1, 1921		568
Cases reported:		
By card	20	
Dead cases by certificate	5	25
		593
Dead cases previously reported	6	
Dead cases not previously reported	5	
Removed	11	
Died out of town	0	
Recovered	0	
Unaccounted for	0	22
Living cases on record July 1, 1921		571
Total tuberculosis death certificates		11

Non-resident deaths:		
Albany Hospital Camp	2	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	0	
City at large	0	
Albany Hospital	1	3
Resident deaths		8

Visits to cases of tuberculosis	142
Visits to physicians	19
Miscellaneous visits	29

Laboratory Report.

Diphtheria.

Initial Positive	48	Release Negative	124
Initial Negative	184	Unsatisfactory	7
Release Positive	32		
		Total	395

Sputum for Tuberculosis.

Positive	22	Unsatisfactory	0
Negative	94		
		Total	116

Widals.

Positive	4	Unsatisfactory	3
Negative	10		
		Total	17

Wassermann Tests.

Positive	27	Unsatisfactory	6
Negative	207		
		Total	240

Gonorrhoea Examinations.

Positive	18	Negative	46
		Total	64

Milk Analyses	239	Miscellaneous Examinations	7
Water Analyses	0		
Pathological Examinations	0	Total Examinations	1078

HEALTH PHYSICIANS' REPORT.

Cases assigned	41
Calls made	106

DIVISION OF SANITATION.

Complaints		114
Inspections		118
Plumbing	13	
Sanitary	105	
Reinspections		68
Plumbing	8	
Sanitary	60	
Garbage collected from 1st District ... bbls.		520
Garbage collected from 2nd District ... bbls.		390
Garbage collected from 3rd District ... bbls.		650
Garbage licenses issued		2
Licenses for ashes issued		3

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections		80
Old houses	34	
New houses	46	
Permits issued		69
Plumbing	67	
Building	2	
Plans submitted		23
Old buildings	6	
New buildings	17	
Houses tested		17
Smoke	0	
Blue or red	2	
Peppermint	2	
Water test	13	
Houses examined	25	
Re-examined	51	
Valid	15	
Without cause	10	
Violations		0

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	7
Dogs removed	20
Cats removed	34
Total	61

DIVISION OF MARKETS AND MILK.

Public market inspections	23
Market inspections	110
Fish market inspections	14
Slaughter house inspections	1
Rendering establishment inspections	1
Pork packing house inspections	5
Hide house inspections	0
Cows examined	568
Cows quarantined	2
Cows rejected	8
Milk depots inspected	35
Inspections of stores selling milk	37
Dairies inspected	54
Milk houses examined	54
Milk cans inspected	223
Milk cans condemned	0
Complaints investigated	3
Violations	1
Bob veal seized ... lbs.	100

Laboratory Work Done at Bureau.

Lactometer readings	81
Temperature readings	189
Fat tests	20
Sediment tests	18

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—REPORT FOR JULY, 1921.—Number of new cases this month, 174. Classified economically: Free, 68; bed cases, 11; prenatal, 5; dispensary soc. service, 23; tuberculosis (pos.), tuberculosis (super.), 18; venereal social, 11. Paid, 106; limited means, bed cases, 40; metropolitan bed cases, 46; metropolitan prenatal, 20; Western Union, 0. Cases carried over from last month, 609; bed cases, 100; prenatal cases, 44; dispensary soc. service, 0; tuberculosis (total), 371; venereal, 94; Western Union, 0. Classification of bed cases: Medical, 60; surgical, 4; obstetrical, 29; prenatal, 25; confinements, 25; maternity, 7; miscarriages, 3; number of babies born, 32.

Visits for Nurses (all departments).—Number of visits, 1,359; for bed care, 954; prenatal instruction, 55; tuberculosis (super. and instr.), 87; venereal dis. instr., 0; general soc. service, 16; for other purposes, 194; dispensary social, 23; supervision, 30.

Source of Nursing Cases.—Metropolitan agts., 43; doctors, 41; nurses, 8; dispensary, 2; family or friends, 20; other sources, 8.

Disposition of Bed Cases.—Discharged recovered, 27; discharged improved, 33; discharged unimproved, 38; discharged dead, 5; discharged to other care, 25; carried, 90. Disposition of other cases: Prenatal: Discharged to mater. care, 32; discharged to hospital, 5; discharged to other care, 6; carried, 40. Dispensary social service: Dis. dispensary care, 0; carried, 0. Venereal: Discharged cured, 1; discharged temporarily, 0; discharged to other care, 0; carried by dispensary, 40; carried under super., 58; carried under care at the House of Good Shepherd, 10. Tuberculosis: Discharged dead, 3; discharged, left town, 0; discharged, not T. B., 2; carried (positive), (supervision), 389. Total number of cases carried over into August, 627.

South End Dispensary Report.—Number of clinics, 83; surgical, 11; medical, 8; gynecological, 8; prenatal, 0; eye and ear, 16; venereal, 12; nerve, 4; nose and throat, 7; skin, 4; children, 7; lung, 1; children's lung (observation clinic), 2; clinics with doctor attending, 80; clinics without doctor attending, 3; number of new patients treated, 128; number of old patients treated, 556; total number of patients, 684.

VOL. LXII SEPTEMBER, 1921 No. 9

ALBANY MEDICAL ANNALS

ASSOCIATION OF THE ALUMNI OF THE ALBANY MEDICAL COLLEGE—FORTY-EIGHTH ANNUAL MEETING.

The forty-eighth annual meeting of the Association of the Alumni of the Albany Medical College was held in the amphitheatre on Monday, June 13, 1921. The usual informal reception was held in the college library, after the commencement exercises in Schenectady, and the meeting was called to order by the President, Dr. Walter H. Conley ('91), of New York City, at three o'clock.

During the session of the afternoon and the reception and dinner of the evening the following named guests and members of the Association were registered:

Trustees: William Barnet, Edmund N. Huyck, Frederick W. Kelley, Robert Olcott, Amasa J. Parker, Charles A. Richmond, Luther H. Tucker, Willis R. Whitney.

Guests: Arthur W. Benson, M. D., M. B. Clopton, Earl N. Flowers, M. D., Thomas W. Lamont, Edward S. McDowell, M. D., Rev. J. V. Moldenhauer, E. S. Persons, M. D., Lyman Irving Thayer, M. D., W. F. Verdi, Augustus Wadsworth, M. D., J. L. Yates.

Faculty, Honorary Alumni: W. M. Baldwin, M. D., John M. Berry, M. D., Melvin Dresbach, M. D., A. W. Elting, M. D., Otto A. Faust, M. D., L. Whittington Gorham, M. D., Henry Hun, Jr., M. D., Arthur Knudson, Thomas Ordway, M. D., Dean, John A. Sampson, M. D., Frank Vander Bogert, M. D., Charles K. Winne, Jr., M. D.

Alumni: D. C. Case ('70); James J. Alexander ('71); O. F. Kinloch ('79); G. S. Munson ('80); Charles C. Duryee ('81); J. B. Washburne ('82); Andrew MacFarlane, Charles H. Moore ('87); Fred M. Barney ('88); J. M. Mosher ('89); Robert Brittain, I. T. Sutton ('90); Walter H. Conley, Charles E. Davis, W. J. Fleming, W. N. Knowlton, Robert B. Lamb, S. Le Fevre ('91); R. A. Heenan ('92); Thomas W. Jenkins, Flavius Packer ('93); Charles Bernstein, Charles H. Cole, William George, Charles T. LaMoure, James T. Park, Arthur Sautter ('94); Charles L. Myers ('95); F. B. Maynard ('96); J. J. Beard, John Giffin ('97); George E. Beilby, Eugene E. Hinman ('99); Thomas H. Cunningham ('00); John M. Griffin ('01); F. C. Maxon, I. E. Van Hoesen ('03); William G. Keens, B. L. Shaw ('04); Percival W. Harrig, C. B. Hawn ('06); Louis H. Gaus, Tiffany Lawyer ('07); N. K. Fromm, John J. A. Lyons ('08); Harry H. Drake, Thomas M. Holmes, F. W. McSorley ('09); F. M. Neuendorf, H. B. Riggs ('11); J. L. Edwards, Donald A. MacDuffie, H. H. Oaksford, William H. Seward, Arthur H. Stein ('12); Rufus B. Crain, J. A. Drooz, Harry S. Howard, W. H. Ladue, M. E. Nolan, E. H. Ormsby, Frank J. Williams ('13); F. C. Furlong, William P. Howard, Harry V. Judge, William O'Connor, W. I. Walsh ('14); G. E. Dailey, W. L. Grogan, John E. Heslin, C. W. K. Tomlinson ('15); M. O. Barrett, Orla J. Park, Harry K. Tebbutt, Jr., Theodore S. West ('16); Stanley E. Alderson, Milton Aronowitz, LeRoy S. Butler, Norman S. Cooper, Leon C. Cote, L. J. De Russo, A. S. Ferguson, Daniel F. Hannon, Ivan Schneible, Irving Van Woert, Earle W. Wilkins ('17); Edward B. Campbell ('18); Jacob Epstein, Alfred L. Madden ('19); P. Lawrence De Noyelles, William L. Gould, William G. Richtmyer, Homer L. Stephens ('20); Charles E. Allen, Arthur F. Cody, E. J. Fitzgerald, Donald B. Glezen, H. J. Harris, L. A. Hulbert, William J. Jameson, Edwin C. Johnson, Joseph P. Lasko, L. Prescott Brown, John J. Quinlan, Lyle A. Sutton, A. C. Swartz, William M. Thomson, Charles E. Wiedenman, Arthur R. Wilsey ('21).

On motion of Dr. Jenkins, seconded by Dr. Bernstein, the reading of the minutes of the last annual meeting was dispensed with and the minutes were approved as printed in the ALBANY MEDICAL ANNALS.

Dr. Lamb moved that the President appoint a committee of three to nominate officers for the ensuing year. The motion was carried and President Conley appointed as such committee, Drs. Robert B. Lamb ('91), Flavius Packer ('93), and Charles C. Duryee ('81). The Nominating Committee retired to prepare its report.

The Recording Secretary then presented the

REPORT OF THE EXECUTIVE COMMITTEE.

One meeting this year has been held, on March 31, 1921, for which arrangements were made for the annual Alumni Reunion and committees were appointed to carry out the details and prepare the program.

The Historian was authorized to appoint class historians for all Alumni classes not now having such an officer and it was also expressed as the sense of the Committee that organization of undergraduates be effected and that the college authorities, in the name of the Alumni Association, request the undergraduates to elect officers.

The Treasurer was authorized to present Alumni dinner tickets to the Alumni Banquet to members of the graduating class.

A resolution was adopted, authorizing the President of the Association to appoint a Committee on the Albany Medical Annals to represent the Association, the College and the Annals.

Respectfully submitted,

J. M. MOSHER, *Recording Secretary.*

On motion of Dr. Crain, seconded by Dr. Ormsby, the report of the Recording Secretary was approved and ordered a place in the minutes.

The President announced the following appointments to the committee on the ALBANY MEDICAL ANNALS authorized by the Executive Committee: Drs. Hermon C. Gordinier ('86), Robert B. Lamb ('91) and Charles G. McMullen ('98).

The Treasurer, Dr. Robert Babcock, presented his report for the year, as follows:

Treasurer's Report.

Cr.	
Balance on hand June 1, 1920	$208.65
Dues received during the year 1920	175.00
Total	$383.65
Dr.	
Various bills paid for which vouchers are presented	$136.63
Balance on hand June 1, 1921	$247.02

(Signed) Robert Babcock,
Treasurer.

On motion of Dr. Hinman the Treasurer's report was accepted and referred to an auditing committee to be appointed by the President. The President appointed as the Auditing Committee, Drs. Charles T. La Moure ('94), Charles Bernstein ('94), and Sherwood Le Fevre ('91), who later reported the Treasurer's accounts correct, and on motion the report was accepted.

President Conley then delivered the annual address.

President Conley's Address.

Fellow Members of the Alumni Association, Albany Medical College:

It has been the custom at the annual meeting of the Alumni Association for the President to deliver an address on some medical subject, or something pertaining to medical progress. It is my intention to digress from this time honored custom and talk about the past, present and future of our Alma Mater, "The Albany Medical College." It is fitting that I should do this at this time as this is the "one hundredth anniversary" of the beginning of medical teaching in Albany, as in the year 1821, Dr. Alden March began his lectures on anatomy, continuing these lectures until he induced Dr. Armsby and others to join him in establishing the Albany Medical College which was founded in 1838.

It has been a century of progressive achievements during which men of high character and ability, most of them busy practitioners, found time to impart the knowledge that they had gained by study and experience to the students who graduated from the Albany Medical College. Many of these graduates have made national reputations, others have achieved international recognition. Hundreds of others went forth to practice medicine in Albany, Troy, Schenectady, and other large cities in the vicinity, also many others into the smaller towns and country districts in the eastern half of New York State, and western New England, where at present a large percentage of the practicing physicians and surgeons are graduates of the Albany Medical College.

The Albany Medical College in its continued progress followed the course of all other medical schools, and the instruction given to the students was given by practicing physicians and surgeons in the city who were able to devote sufficient time to deliver the necessary course of lectures covering the whole field of medicine and surgery. We all hold with reverence such men as Doctors Vander Veer, Ward, Tucker, Hun, Bigelow, Hailes, Morrow, Macdonald, and many others who devoted their valuable time to teaching the students in the college, outside of the fact that they had large practices.

The remarkable discoveries in medical research during the past 20 years have made it necessary to give special and intensive laboratory instruction in chemistry, physiology, pathology and bacteriology, and on account of the increased instruction necessary in these branches, part-time professors could not cover their subjects properly, so that it became necessary to employ full-time men in these departments. This was recognized by several general surveys of the medical schools by those interested in medical education, also the American Medical Association, until finally New York State recognized the importance of controlling the standards of medical education, and demanded that medical schools must employ a certain number of full-time professors. This brought about the affiliation of medical colleges with universities, as it was to the universities that the medical colleges looked for professors to teach these subjects. Prior to these changes, students' fees had been sufficient to defray the expenses of the medical school, due to the fact that the professors gave their time gratuitously. As a result of these changes, the expenses of instruction in medical education have increased tremendously during the past few years. At the present time, the student's fees only pay about twenty-five per cent. of the total expenditure for his instruction. Many medical schools have not been able to bear the burden of this expense, and during the past fifteen years, one after another have closed, until nearly eighty medical schools have ceased to exist, most of them closing because the amount of money necessary for maintaining first class standards of instruction could not be secured. The situation in the Albany Medical College has been in no respect different from the others, and the alternative has been faced of securing sufficient funds for its continuance on a basis that would give the students a first class medical education, or allowing the college to close.

It has been proved beyond question that it is possible to maintain in Albany, a school of the highest quality, and of a size suitable to the needs of the community, with well equipped laboratories, manned by thoroughly trained full-time professors, assistants, and technicians, and to have their work supplemented during the senior years of the course by the highest type of clinical teaching of students in small groups, and to do this at an expense less than is required in some of the larger institutions.

Of the need of the continuance of the Albany Medical College, there is absolutely no doubt. On every hand we are confronted with a growing demand for physicians from the smaller towns throughout the district supplied by the Albany Medical College. Even at the present time, the New York State Department of Health is deeply concerned over the lack of physicians in the rural districts of the state.

The Albany Medical College enjoys advantages open to few medical colleges in this country, which are as follows:

The Medical Library of New York State is open to the use of the students, and this is a tremendous asset.

The State Department of Health, being in Albany, is of great advantage, but in addition, the co-operation with this department in the undergraduate courses of public health, and in the graduate courses for health officers, is of great benefit.

The co-operation of the General Electric Company at Schenectady who have opened their research laboratories and their emergency hospital to the medical college, is of great importance.

The pre-medical courses at Union College are attracting increasing numbers of young men who take at least a two years preparatory course before entering the Albany Medical College.

The above facts, the condition of the school, its honorable career, its contribution to medicine, and more than all, the great and imperative need for its continuing to supply practicing physicians and surgeons to the district supplied by the College, made so strong an appeal to the Board of Trustees that they were unanimous in their resolution to put the college on a sound financial basis. The question which naturally arose was this—"giving full value to the traditions of the college and the desirability of preserving them, taking for granted the need that exists for its continuance, how could the financial situation be met?" This question was asked of the General Education Board of the Rockefeller Foundation by the Board of Trustees of the Albany Medical College, and the General Education Board have answered by appropriating for the maintenance of the Albany Medical College $20,000 a year for three years, on condition that the Board of Trustees would secure $40,000 a year for three years, exclusive of students' fees. The Board of Trustees have secured practically this whole amount. As President of the Alumni Association, I have guaranteed the Board of Trustees that we will assist in raising the necessary funds to meet this amount, and it is my sincere hope that the members of the Alumni Association will co-operate with me in doing this.

There is no question in my mind but what the Board of Trustees with the assistance of the Alumni Association will obtain the amount of money required to meet the request of the General Education Board to carry on the work of the college for the next three years, and during that time will be able to raise an endowment fund sufficiently large to enable the Board of Trustees to go back to the General Education Board and make a request of them to give a large capital sum instead of the annual appropriation.

At this point, I might state for the information of the Alumni Association that there is about $60,000 in the Building Fund which it is hoped will be increased to a sufficient amount to build a new building to replace the old obsolete college building which has been used for so many years, and whose memories are dear to all of us. This building will be built on a site given by the county and city of Albany, adjoining the Albany Hospital.

We all venerate our former professors, and feel that they builded well in maintaining the standards of the college under unsatisfactory conditions. By assisting in continuing the good work started by them, we show that we were, and are loyal to them, and that we are true to the love for our Alma Mater which they instilled into us.

Dr. Mosher moved the thanks of the Association for the unusually pertinent and classical address of the president, which had been received with marked attention and evidence of approval. The Recording Secretary put the motion, which was unanimously carried, and President Conley resumed the chair.

Dean Ordway was then called upon and presented an informal "Report on the Condition of the College."

REPORT OF THE HISTORIAN, ARTHUR J. BEDELL, M. D.

Mr. President and Gentlemen of the Alumni Association:

In some respects the past year has been an important one to our College. First, as to its support. You will hear during the day how outside help has been granted to the institution and how for the next three years we will try to demonstrate even more fully than ever in the past that there is a great need for our Alma Mater. This foreign source must be assisted by our Alumni body whom we know will stand behind and give all the assistance possible so that the Medical Department will not only continue to grow but will branch out in such a way as to make its influence felt through a greater circle and further so that the men who come to us for instruction will feel an increasing pride in it.

Second, is the prospect of better quarters. Often we hear that men do better work in better surroundings. There are reasons to believe that this year we are nearer the realization of the desire of years.

By noting the death list you will see that our Alumni Association is being rapidly reduced in numbers. It is, therefore, necessary for each one to do much more than he has to help in the selection of men sent to the school and to help her whenever possible by interesting those who are in a position to materially aid in the development of a better school.

This year to the men who join our Association, we urge fidelity to this old school. We trust that they will always feel that those who have taught them are ever ready and willing to assist them to become more and more proficient to the end that patients' lives may be saved and that the days of the true physician may be happier in the knowledge of something well done.

We have lost twenty-two members since our last meeting.

NECROLOGY

Dr. CHARLES T. WEBB ('52), Davenport, Ia., died September 9, 1920.

Dr. WILLIAM L. HOLLISTER ('61), Austin, Minn., died February 25, 1921.

Dr. HARVY J. CRISTMAN ('64), Herkimer, N. Y., died April 8, 1921.

Dr. GEORGE GARY WHITAKER ('65), Fulton, N. Y., died February 7, 1921.

Dr. WILLIAM DEXTER SWAIN ('67), Copake, N. Y., died November 10, 1920.

Dr. BYRON U. STEENBERG ('70), Albany, N. Y., died August 22, 1920.

Dr. GEORGE EMERSON ('73), Winfield, Kan., died April 10, 1921.

Dr. CHRISTIAN C. VEDDER ('73), St. Johnsville, N. Y., died May 1, 1921.

Dr. HENRY E. MERENESS ('74), Albany, N. Y., died August 4, 1920.

Dr. DANIEL T. CONDICT ('74), Goshen, N. Y., died November 19, 1920.

Dr. THOMAS FEATHERSTONHAUGH ('77), Duanesburg, N. Y., died October 27, 1920.

Dr. FREDERIC L. CLASSEN ('81), Albany, N. Y., died August 13, 1920.

Dr. LAWRENCE KENNY ('81), Troy, N. Y., died March 6, 1921.

Dr. LEMON THOMPSON ('82), Glens Falls, N. Y., died September 15, 1920.

Dr. FREDERICK RANDALL GREEN ('84), Albany, N. Y., died June 6, 1920.

Dr. WILLIAM HAPPEL ('90), Albany, N. Y., died December 10, 1920.

Dr. THOMAS HELME ('90), McKownsville, N. Y., died January 4, 1921.

Dr. FRANK E. DEAN ('91), So. Shaftsbury, Vt., died March 23, 1921.

Dr. OTIS H. DECK ('94), Herkimer, N. Y., died June 13, 1920.

Dr. JOSEPH B. BETTS ('94), Buffalo, N. Y., died January 29, 1921.

Dr. HARRY FISK HULL ('99), Troy, N. Y., died October 30, 1920.

Dr. FRANK GARTEN ('08), New York City, died April 2, 1921.

Your Historian regrets that he is unable to be present but has to attend the American Ophthalmological Society meeting.

HISTORIANS

Dr. A. J. Bedell, Historian Alumni Association.
Class of 1861, ———.
Class of 1871, Dr. Stephen A. Ingham, Little Falls, N. Y.
Class of 1881, Dr. J. H. Mitchell, Cohoes, N. Y.
Class of 1891, Dr. Charles E. Davis, Albany, N. Y.
Class of 1901, Dr. Thomas F. Judge, Troy, N. Y.
Class of 1911, Dr. Bertrand Gifford, Saugerties, N. Y.

HISTORY OF THE CLASS OF 1871.

LITTLE FALLS, N. Y., *June 7th,* 1921.

Dr. A. J. BEDELL, 344 State Street, Albany, N. Y.

Dear Doctor: Inasmuch as there is uncertainty as to my materializing next Monday, I will inclose the replies from those of the 1871 class known to be living. This with the statement recently sent completes my report. As regards myself, I have been since graduation, with the exception of one year, 1872, at the Albany City Hospital, in Little Falls, N. Y., engaged in practice, and with that degree of success that warrants a satisfied feeling; my health has been good and the returns for my service sufficient.

Trusting it may be my privilege to meet with you Monday, and that the reunion of those who have been so long separated will be one of enjoyment and one from which much pleasure will be derived, I am

Yours very sincerely,

STEPHEN A. INGHAM.

JACOB F. FORCE, 651 South Pasadena Avenue, Pasadena, California: "Replying to your letter of March 3rd would say I am still in Pasadena, Calif., which has been my home for the past sixteen years.

I retired from the practice of medicine so long ago that I am not much in touch with the profession; but I surely have not forgotten the Albany Medical College, nor the Class of 1871, of which I was a member. I never failed to appreciate the benefits I received while I was a student at Albany. I am in good health for one who passed his 78th birthday the second of this month, and while on the "retired" list, I find many activities to which I can give more or less attention. I shall look with interest for the report you make of the Class of 1871, at the anniversary in June, and hope that all living members of the class will report to you."

J. C. STRADER, LaFayette, Sussex Co., N. J.: "I well remember that this is the fiftieth year of my work as a physician and surgeon. Also glad to tell you I have never forgotten you and our pleasant college days at the A. M. C. I have not as yet retired; but have been in business constantly all these long years. I have good health and the Lord only knows how long I can keep up the fight. Married but once and my wife is living and well."

G. L. ULLMAN, 92 Central Avenue, Albany, N. Y.: "I am still among the living, one of the boys of Class '71. A half century has passed, and now our classmates have reached over the age of seventy. I am practicing as usual, naturally smiling, and in good health. Continue doing my share of active duty, notwithstanding the old time family doctor is fast disappearing and a younger element taking his place, thus leaving the field of general practice to specialists, hospitals, maternities, osteopaths, chiropractors and others.

"Time changes methods, even the old horse has been interchanged for motor power.

"So far in life I have enjoyed the world, no regrets to offer in my way worked hard, lived comfortable, traveled a good deal, had plenty of experience, still bear a successful vigorous juvenality, am told a youthful countenance with a clean shaven face, and possess a forty-year shining dome, bordered by a silver fringe, and still courageous with a final aspiration to write again for our sixtieth reunion."

H. L. Cookingham, Red Hook, N. Y.: "Yours received and in reply would say the lines have fallen to me in pleasant places. Came here in 1873, married in 1876, have four children, two daughters and two sons. Daughters married and away from home. Oldest son is U. S. Consul at Tunis; youngest is surgeon to the Thompson House Hospital, Rhinebeck, N. Y. So my bride and myself are alone at the home as we started. I have been elected coroner for two terms, was postmaster for five years, president of the village for four consecutive years, health officer of the town for eight years. Have been honored by my church (M. E.) in election to General Conference four times.

"Best of all a kind Providence has favored me with perfect health all these years. Have been in auto accidents—in one of which my life was miraculously spared."

George Conkling, Durham, N. Y.: "I have been a little lazy in answering,—you know how it is yourself after being in the harness as long as you and I have. After leaving Albany I went to Northville, N. Y., stayed one year, then moved to Durham, Greene County, N. Y., and am there yet in active practice. It is a boarding section of the Catskills and I have no fault to find. My family consists of wife and self, besides a colored man that has been with me over thirty years. I have two autos (not flivvers), two good horses, so I have no trouble winter or summer getting around. My health has been exceptionally good until about a year ago when I contracted the flu and was about two months getting over it. Have not been quite as strong since. I hope, however, I may be able to see you at our June meeting for I expect to be there."

REPORT OF THE CLASS OF 1891.

There are ten letters from the Class of '91; replies by telephone from six; revised list of deceased members; list of names of verified lists; list of names of the remaining members of the class unheard from.

Every effort has been made to stimulate interest in the college and to get in touch with the living members of the class. I think that the attendance will justify the effort.

Charles E. Davis,
Historian.

Letters received from the following:

Frank Edward Dean, South Shaftsbury, Vt.
Nathan David Garnsey, Kinderhook, N. Y.
H. Warner Johnson, Hudson, N. Y.
Edward Joslin, Whitehall, N. Y.
John Whitman Joslin, 32 South William St., Johnstown, N. Y.
Louis LeBrun, 238 Lark St., Albany, N. Y.
Lewis Ryan Oatman, Greenwich, N. Y.
Harvey Ward Van Allen, Springfield, Mass.
James Wesley Wiltse, 176 State St., Albany, N. Y.
Robt. Brockway Lamb, Harmon-on-Hudson, N. Y.
Walter Henry Conley, Metropolitan Hospital, Blackwells Island, N. Y.
Charles Edmond Davis, 286 Washington Ave., Albany, N. Y.

Deceased members of Class of 1891:

William S. Ackert, 258 Mill St., Poughkeepsie, N. Y., died November 8, 1901.
J. M. Bowman, died October 23, 1918.
Franklin Edward Deuerlein, Corning, N. Y., died September 13, 1895.
Edward Alton Hoffman.
Joseph Eugene Kelly, New London, Conn., died January 17, 1908.
William James Kernan, Albany, N. Y., died November 24, 1897.
William James Pennington, 183 South 4th St., Brooklyn, N. Y., died March 30, 1908.
Geo. Henry Reynolds, Minot, California, died March 21, 1912.
Frank Kelley Roark, died April 19, 1914.
Will Orvis Scott, died, date unknown, letter returned.
Abram Baker Simmons, Cohoes, N. Y., died September 12, 1893.
James Henry Timmers, Buffalo, N. Y., died November 24, 1902.
Everet Evertson Tracy, died April 9, 1912.
George Austin Williams, died, Masonic Home.
Warner Abbott Miles, died September 1, 1898.
Frederick A. Williams.

Class of 1891 (verified list):

Charles Edmond Davis, 286 Washington Ave., Albany, N. Y.
Frank Edward Dean, South Shaftsbury, Vt.
William John Fleming, 169 Third St., Troy, N. Y.
Nathan David Garnsey, Kinderhook, N. Y.
Henry Warner Johnson, 432 Warren St., Hudson, N. Y.
Edward Joslin, Whitehall, N. Y.
John Whitman Joslin, 32 South William St., Johnstown, N. Y.
Louis LeBrun, 238 Lark St., Albany, N. Y.
Sherwood LeFevre, 13 Notre Dame St., Glens Falls, N. Y.

Lewis Ryan Oatman, Greenwich, N. Y.
Michael Francis Phelan, 1637 Fifth Ave., Troy, N. Y.
Harmon Arthur Staley, 797 State St., Schenectady, N. Y.
Harvey Ward Van Allen, Springfield, Mass.
Arthur Burton Van Loon, 198 State St., Albany, N. Y.
James Wesley Wiltse, 176 State St., Albany, N. Y.

Other members of the class not heard from:

John Hunting Cobb, Binghamton, N. Y.
Joseph Freedman, 162 E. 74th St., New York City.
Edward Lee Johnson, 230 North Garey Ave., Pomona, Calif.
Sherman S. Kathan, Ballston Spa., N. Y.
William Newell Knowlton, Melrose Highlands, Mass.
George John Van Vechten, Oneonta, N. Y.
Merton Wheelock Brown, Cedarville, N. Y.
Joseph William Droogan, 1513 Parker St., New York City.
Ward Beecker Saltsman, 332 Purdy St., Buffalo, N. Y.
Homer J. Grant, Buffalo.

Replies by telephone:

William John Fleming, 169 Third St., Troy, N. Y. Will attend the meeting.

Henry Warner Johnson, 432 Warren St., Hudson, N. Y. Will not attend. Reports that he is prosperous and happy and his boys are away to college.

Sherwood LeFevre, 13 Notre Dame St., Glens Falls, N. Y. Will attend the meeting.

Michael Francis Phelan, 1637 Fifth Ave., Troy, N. Y. Will attend the meeting.

Harmon Arthur Staley, 797 State St., Schenectady, N. Y. Will attend the meeting.

Arthur Burton Van Loon, 198 State St., Albany, N. Y. Will attend the meeting.

Walter H. Conley, Metropolitan Hospital, Blackwell's Island, New York: "After graduation, I became an interne in the Albany Hospital, remaining there until January 31, 1893. From February 1st to July 1st, 1893, served as externe in Roosevelt Hospital, New York City. From July 1st, 1893, to December 6th, 1894, served as an assistant to Drs. Vander Veer and Macdonald, working with them in the Albany Hospital and the vicinity of Albany. On December 6th, 1894, was appointed a resident physician at the Buffalo State Hospital where I remained until February 28th, 1902. While at the Buffalo State Hospital, during the Spanish-American War, was acting assistant surgeon in the 165th Regiment, Buffalo. After leaving Buffalo, I came to New York City, did special hospital work, and also took up a study of construction, particularly in relation to hospitals, learning all details in relation to the same. On February 1st, 1910, was appointed acting secretary to the Hon. Michael J. Drummond, Commissioner of Public Charities of the City of New York.

"On August 1st, 1911, was appointed superintendent of Metropolitan Hospital, Blackwell's Island, the largest general hospital in the United States. I have remained in this position since that time, and in addition to being the superintendent of Metropolitan Hospital, I have been the acting general medical superintendent of all institutions connected with the Department of Public Charities on Blackwell's Island. In addition to my work as medical superintendent, I have assisted in the planning and construction of many new buildings in the Metropolitan Hospital district and other hospitals in the Department of Public Charities. During the past six years, I have visited practically all hospitals in the United States, Canada, and Cuba, making a special study of hospital work, hospital construction, etc.

"During the World War, I was a member of the Advisory Committee on Hospitals and Institutions to the District Board of the Metropolitan District, also represented the City of New York in obtaining hospital beds for both the Army and Navy, working in conjunction with the surgeon general's office in both departments.

"Since 1914, I have been national president of Phi Sigma Kappa Fraternity, and have made three trips to the Pacific coast and return, visiting colleges, hospitals, etc.

"Since 1918, I have been president of the Greater New York Alumni Association of the Albany Medical College. At the present time, I am president of the General Alumni Association of the Albany Medical College.

"I was married to Miss Constance Molineaux on May 16, 1918, and we are living at the Cottage, Metropolitan Hospital, where we will be pleased to see any members of the Alumni whenever they are visiting New York City."

NATHAN D. GARNSEY, Kinderhook, N. Y.: "Nothing extraordinary has happened in my professional career since graduating from the A. M. C. in 1891. I have lived and practiced medicine in Kinderhook, N. Y., during the whole of that time, excepting when in military service as first lieutenant at Camp Wheeler, Georgia, for three months in 1917, and about nine months on the Coast Defenses of Long Island Sound in 1918."

HENRY WARNER JOHNSON, 432 Warren St., Hudson, N. Y.: "Having planned to go north till September, I regret not meeting the class on June 13th. The story of my life since 1891 has but a short chronicle—one location, Hudson, N. Y.; one wife, married 1898; two sons, one a student at Hamilton College, one at Amherst. I have kept assiduously at work, taking one to two months vacation each year. My diversion is a farm. I received excellent help in practical work in New York and Baltimore. My work has been interrupted three times by typhoid, fracture of right leg and appendicitis.

"I am disappointed not to meet the members of the class and hope the fates have smiled on all the surviving."

EDWARD JOSLIN, 109 Main St., Whitehall, N. Y.: "After graduation I served as interne at St. Peter's Hospital for one year, and a few months afterward located at Whitehall, where I have been ever since, doing what I can, and being done as little as possible."

J. W. JOSLIN, 32 South William St., Johnstown, N. Y.: "Nothing eventful in my life except serving on the Board of Exemption as examining physician during the World War and being elected coroner of Fulton county for eight or nine (it became a regular habit so I am not sure) consecutive terms, and still going strong."

LOUIS LEBRUN, Albany, N. Y.: "I was in general practice until 1905; at present ear, nose and throat at 238 Lark street, Albany, N. Y."

ROBERT B. LAMB, Crichton House, Harmon-on-Hudson, N. Y.: "Replying to your rather painful reminder that I have been thirty years away from medical school, I can only say that my professional career has been extremely busy and active. Within a year or two after finishing at Albany, I entered the State Service and gradually worked my way to superintendent. This position I held for eleven years, my final service being at Matteawan State Hospital. I resigned from there in 1911 (which scarcely seems ten years ago) and have since followed private work exclusively.

"My new house as headed above, is rather the best small hospital for the treatment of mental cases available any where in America and is just about ready for occupancy. It is my present intention to join with the class on this anniversary occasion, where I shall hope to greet those whom I have not seen in years."

LEWIS R. OATMAN, Greenwich, N. Y.: "Upon graduation I served as an interne at Ward's Island Hospital for one year after which I located in Gloversville, N. Y., where I practiced for seven years. During that time I served as surgeon on the staff of the Nathan Littauer Hospital and acted in the capacities of city phyysician and county physician of Fulton county. In 1900 I removed to Greenwich, N. Y., where I still reside and where I enjoy a very satisfactory general practice. I have been health officer of the towns of Easton and Greenwich for some time and I am at present assisting the nose and throat specialist at the Mary McClellan Hospital at Cambridge, N. Y.

"On September 27, 1893, I married Agnes E. Morris. We have two children, a daughter Charlotte who graduated from Goucher College June 1918, and was married June 1920 to J. Sanderson Hand; and a son Lewis Morris who is entered at Dartmouth College for 1921."

HARVEY W. VAN ALLEN, 19 Maple St., Springfield, Mass.: "In reply to your request for information for class history of the Albany Medical College, would say a man cannot say much about himself; he doesn't like to say derogatory things and "self-praise" is worth nothing. I have spent my entire medical life in Springfield, have been happy in my work and believe I am classed as successful. My work is confined entirely to roentgenology and radium therapy. Naturally, I have several hospital appointments and have written fairly extensively on these subjects. I am married and have two children, a boy and a girl. I have been fairly successful in real estate holdings, of which I have several valuable pieces of property. I was re-elected alderman last fall by two-thirds of the total vote. I am not old enough yet to say my health continues good for I am still young, being fifty-two years of age."

James W. Wiltse, 176 State Street, Albany, N. Y.: "You ask me for a brief sketch of what I have been doing in the thirty years that have elapsed since that day in 1891, when we stepped out into the world with our sheepskins, tied up in their pink, red, blue or some other colored ribbon, safely tucked away under our arms and with the way to a career stretching before us.

"For my own part it seemed rather a steep road and a hard climb. I graduated 'broke' with $400 debt hanging over me. This was the sum, over and above what I had been able to earn and save, necessary to pay my college expenses. With my sheepskin in my possession I hustled back to the little Greene county village where my parents lived. There I rested for a brief period and decided what my next move would be. At the end of two or three weeks I sought out an opulent brother and borrowed from him the munificent sum of $25. I then came back to Albany to rent, furnish, and equip with instruments, drugs, books, etc., my 'luxurious' apartment. My apartment cost me $9 per month rent and was located at 1184 Broadway.

"Do not imagine that I had any magic wand or Aladdin's lamp to stretch the $25 so that it covered all the outlay here mentioned. No, my dear doctor. The rent was paid in advance as it had to be, but the tradesmen were more lenient and sold me goods on credit, the only restriction being that while I had the use of the goods they remained theirs until paid for (otherwise they were good fellows).

"These little matters attended to I opened up shop and very conveniently the woman in the flat above me arranged to have a miscarriage on the very day I started in. Of course you understand, under the training we got thirty years ago, how competent I was to take care of an abortion with retained placenta. Well, at any rate, I had sense enough to know that things that one can not handle one-self one should ask someone who is competent to do them. So I asked my very good friend, Dr. James E. Brennan, who was then one of Albany's bright young doctors, and between us we straightened the case out and I received my first $10 fee in cash. I mention this matter of cash with due reverence because, during the next year, I was to do many a job where the prospects looked good but I am still waiting for the cash.

"Well, I went on doing lots of work as the new doctor always will when he locates where the clientele is poor, and received very little in fees for it. But about July 1st good fortune and a mighty good friend, Michael Connors by name, a Democratic leader in the ninth ward, obtained for me from Mayor James Manning an appointment as district physician at a salary of $400 per year payable in monthly instalments. This solved the rent problem and then some.

"To shorten a long story I began to get a better paying clientele and in eighteen months from the time of opening up I had paid my college debts, had paid for all my office appurtenances, had furnished a new flat at 1203 Broadway to which I had moved in May 1892, and in October 1892 married Miss Elizabeth M. Bailie of Albany and shook the boarding house forever. In December 1895, a son, Stanley B. Wiltse, was born to us. In 1896, having reached the limit of expansion in North Broadway and feeling that I should like to get into a bigger field without losing for the time being at least the clientele I had built up in North Albany I moved into the home and office just vacated by the late Dr. S. B. Ward at 133 North Pearl street. Here I remained three years doing general medicine and at the same time working along lines to attract G. U. work.

"At the end of my three years lease at 133 North Pearl street I felt well enough established in the central part of the city to move once more so that I should be more centrally located. I therefore moved to 6 South Hawk street. About this time, through the kindness of the late Dr. John V. Hennessy and the Sisters of Mercy, I was appointed to the staff of St. Peter's Hospital in the department of G. U. and Dermatology.

"During these ten years of early struggle the vision of some day going to Europe for post-graduate work in this chosen field had been constantly in mind but it seemed impossible for lack of funds to attain it. However in the late winter and early spring of 1901 I determined to try it.

"After arranging my business affairs and providing for my family which consisted of my wife and two children, a little daughter having been born in 1900, I sailed on the 23rd day of April, 1901, for Europe to take up work at Vienna under Neumann, Kaposi, Lang and Von Frisch. Three months of work and one of travel completed my visit to Europe, and the latter part of August found me again in Albany. From that time on I have confined my work to skin and G. U.

"During the past twenty years I have continued at St. Peter's Hospital, have held minor teaching appointments in the Albany Medical College, finally arriving at the post of clinical professor in the Department of G. U. and Dermatology. On the reorganization of the school

I resigned from the teaching staff but continued my work at the hospital. I am a member of and have held the offices of secretary, vice-president and president of the Albany County Medical Society, member of the New York State Medical Society and member of A. M. A.

"Ten years ago I bought a house with a few acres of land at North Chatham, Columbia County, N. Y., and there we reside while I carry on my work at 176 State street, Albany, N. Y. I have practiced at 176 State street for the last five years.

"My son, now a teacher of electrical engineering at R. P. I., has a little daughter eighteen months old so I am now a grandfather. Life runs pretty smoothly. I get a little recreation now and then by whipping a trout stream or in the fall and winter by hunting rabbits and other small game that chances to be about. I may say however that while I can catch some trout the game is usually safe except for a bad scare occasionally, for I am not much of a marksman but I have a pretty good time."

J. M. BOWMAN. Dr. Bowman died October 23, 1918, during the epidemic of influenza in Brooklyn, where he had moved in the spring of 1917. He left his wife and one son who was at that time in service in France.

FRANK KELLEY ROARK. Dr. Roark died April 19, 1914.

EVERTSEN TRACEY. Dr. Tracey died April 9, 1912, at his home in Prairie View, Ill., leaving his widow and one son.

At the conclusion of the reading of the Class histories Dr. Lamb presented the report of the Nominating Committee. The report of the Committee was before the Association for action, and on motion of Dr. Charles E. Davis ('91) the report was accepted and adopted, and the Recording Secretary was instructed to cast one ballot for the officers proposed by the Committee. The Recording Secretary cast the ballot, and President Conley announced as duly elected the

OFFICERS FOR THE YEAR

PRESIDENT: Dr. WALTER H. CONLEY ('91), New York City.

VICE-PRESIDENTS:

Dr. MARCUS A. CURRY ('04), Morris Plains, N. J.
Dr. MICHAEL J. THORNTON ('), New York City.
Dr. CHARLES C. DURYEE ('81), Schenectady, N. Y.
Dr. WILLIAM H. GEORGE ('94), Albany, N. Y.

RECORDING SECRETARY, Dr. J. MONTGOMERY MOSHER ('89), Albany, N. Y.

CORRESPONDING SECRETARY, Dr. CLINTON B. HAWN ('06), Albany, N. Y.
TREASURER, Dr. ROBERT BABCOCK ('84), Albany, N. Y.
HISTORIAN, Dr. ARTHUR J. BEDELL ('01), Albany, N. Y.
EXECUTIVE COMMITTEE (Term expires 1924):
Dr. JOHN L. EDWARDS ('12), Hudson, N. Y.
Dr. THOMAS H. CUNNINGHAM ('00), Glens Falls, N. Y.
Dr. CHARLES BERNSTEIN ('94), Rome, N. Y.
Dr. WALTER J. FLEMING ('91), Troy, N. Y.

After adjournment the Association proceeded by automobile to the Albany Hospital where an informal reception was held, prior to the annual dinner which was graced by the attendance of a large number of Trustees of the College and Governors of the Hospital.

ANNUAL ALUMNI DINNER

The annual dinner of the Association was held at the Albany Hospital on Monday evening, June 13th. President Conley presided at the speakers' table, and with him were the guests of the evening, Mr. Thomas W. Lamont, Trustee of the Carnegie Foundation, the Reverend J. V. Moldenhauer, and others. The address of the evening was by Mr. Lamont who spoke at length, most entertainingly and with the authority of personal investigation, upon the social and economic problems presented by the European nations in consequence of the effects of the war. The graduating class was represented by Dr. John Joseph Quinlan, as its orator for the occasion. President Huyck, of the Board of Trustees, reported upon the present status of the College. The following is an abstract of his remarks:

PRESIDENT HUYCK'S STATEMENT ON THE AFFAIRS OF THE COLLEGE.

Last year, the General Education Board appropriated an emergency fund of ten thousand dollars for the Albany Medical College for the year 1920-1921. This appropriation was made without a survey of the College by Mr. Abraham Flexner and really without a definite request on the part of the Board of Trustees of the College. The General Education Board knew that with the income already available ten thousand dollars additional would carry the College through the year comfortably. Dr. Flexner promised to make the survey in the fall and he came on December 13, 1920.

He visited the College in Schenectady, went through the Research Laboratory of the General Electric Company, then came to Albany and visited the Albany Hospital, the State Medical Library, the Medical College, the State Hygienic Laboratory. Time did not permit his visiting other hospitals and institutions which he had wished to see. Soon after his inspection, he wrote the Trustees of the Medical College asking that a matured proposition be submitted to the General Education Board of what the Trustees would and should undertake in the way of providing an income for the College. After careful consideration of the whole situation, the proposition called to the General Education Board's attention was as follows:

The Trustees of the College would provide an annual income for six years, exclusive of students' fees, of thirty thousand dollars provided the General Education Board would add to this amount the sum of twenty-five thousand dollars. At the end of six years, the Trustees would undertake to provide a permanent endowment of one million dollars provided the General Education Board would add one million dollars to this sum.

Dr. Flexner was obliged to go to Europe the last of December and returned only a few days before the February meeting of the General Education Board. Dr. Buttrick was absent at the February meeting and it was found impossible to bring before the board any medical college matters. Realizing, however, that the situation at Albany was urgent, Dr. Flexner called a special meeting of the executive committee of the General Education Board and on March 29th, 1921 informed the Trustees of the Medical College that the executive committee had appropriated the sum of twenty thousand a year for three years provided the Trustees would obtain an additional income of forty thousand a year, exclusive of students' fees. This seemed to be at first a serious undertaking because the time was quite short before commencement and the general business depression made it a very inopportune time to ask for subscriptions for any purpose. The Board of Trustees, however, met promptly and pledged themselve to raise the sum required and so notified the General Education Board.

The result is that to-night I am able to report not that we have raised the forty thousand dollars for the first year or the second forty thousand dollars for the second year but that the whole sum of one hundred and twenty thousand dollars has been subscribed and, therefore, the sixty thousand dollars promised by the General Education Board is secured and the school is fully financed for the next three years.

The money has been raised without an organization, without a general appeal to the Alumni of the College and by the subscriptions of a comparatively small number of the friends of the College. The response has been most generous and the interest in the College, the belief in its future as well as the desire to insure this future has been far greater than the Trustees expected to meet.

There have been several very gratifying features of our efforts to raise this money, one of which was that Dr. Conley pledged one thousand dollars for the Alumni of New York and vicinity; another that the Alumni and friends of the College in Glens Falls joined together with great enthusiasm and subscribed more than three thousand dollars toward the fund. The third most gratifying and important fact was the subscription of over seven thousand dollars toward the fund for the maintenance of the school, by members of the teaching staff. These subscriptions were undertaken without suggestion or request from the Trustees and are of the greatest encouragement to the Board as indicating the belief of the teaching force in the value of the school and their determination to work to assure its future. Toward the forty thousand dollars needed, the General Electric Company subscribed five thousand dollars and Dr. Richmond for friends in Schenectady and others from whom he obtained the amounts guaranteed five thousand dollars for each of the three years. The balance was raised by subscriptions either for one, two or three years or by subscriptions to the endowment fund, the interest of which would be available immediately for the maintenance of the College.

The permanent endowment fund of the College has been increased from almost nothing to over fifty thousand dollars in the last two years, and in addition subscriptions toward the endowment fund of more than one hundred and fifty thousand dollars have been secured so that the total endowment at this time is about two hundred and seven thousand dollars. This, we feel is a very gratifying start toward the large permanent endowment that we expect to secure.

We realize that in this financing of the school for the next three years, our work has only begun but we expect to make such a record and through persistent efforts during the next three years to secure such a sum that we can go back to the General Education Board and apply to the Carnegie Corporation for permanent assistance with a force in our appeal that they will acknowledge. There is no doubt in the minds of the Trustees of the Board but that we shall secure the generous assistance that we need to make the endowment fund large enough to assure the future of the school for all time.

The spirit shown has been splendid. The standing of the school from an education point of view is receiving a wide recognition and we believe that the Albany Medical College merits the support of every one of its graduates.

An institution is not worth preserving simply because it is nearly a hundred years old but when, throughout those hundred years, it has enlisted services of men of highest character and ability in the medical profession, when it is considered that in these years it has graduated and sent out into the world hundreds of young men to devote their lives to the practice of medicine and that throughout a large area of Northeastern New York the majority of the successful practicing physicians are graduates of the Albany Medical College, it is an inspiration to every one of us to continue our efforts, determined that the future of the College shall be even more successful and the services that it will render even more important.

Commencement Exercises.

The ninetieth commencement exercises of the Albany Medical College were combined with the one hundred and twenty-fourth commencement of Union College and were held at the First Presbyterian Church, Schenectady, N. Y., on Monday, June 13, 1921, at ten o'clock.

The graduating exercises were opened by singing the 117th Psalm, followed by a prayer. The Albany Medical College trustees, faculty and students formed part of the procession from the campus to the church. The Honorary Chancellor's Address was delivered by the honorable John William Davis, formerly Ambassador to Great Britain.

The degrees were conferred by the Rev. Dr. Charles A. Richmond, Chancellor of the University. The following named candidates for the degree of Doctor of Medicine were presented by Dean Ordway, representing the Faculty:

Graduates—Class of 1921.

Charles Ethan Allen, A.B.	Orleans, Ind.
L. Prescott Brown, A.B.	Mt. Kisco, N. Y.
Arthur Francis Cody	Schenectady, N. Y.
Edward Joseph Fitzgerald	Glens Falls, N. Y.
Donald Briggs Glezen	Lisle, N. Y.
Harold Gerome Harris	Albany, N. Y.
Lynden Andrew Hulbert	Middleburg, N. Y.
William John Jameson	Schenectady, N. Y.
Edwin Charles Johnson	Schenectady, N. Y.
Joseph Paul Lasko	Schenectady, N. Y.
Maver Miller Lee	Schenectady, N. Y.
John Joseph Quinlan	Watervliet, N. Y.
Lyle Adin Sutton	Prattsville, N. Y.

Arthur Charles Swartz	Albany, N. Y.
William McCheyne Thomson	Albany, N. Y.
Charles Edward Wiedenman	Schenectady, N. Y.
Arthur Raymond Wilsey	Greenfield Center, N. Y.

The commencement procession, a time-honored and impressive ceremonial, formed at half after nine o'clock. The Trustees and candidates for honorary degrees met at the President's House, the Faculty at Silliman Hall, the Undergraduates and Alumni, the younger classes preceding, and the graduating class at the College Chapel. The line of march was past Silliman Hall and the President's house to the church, where seats were reserved for those taking part in the procession.

Chancellor Richmond announced the award of prizes:

The Vander Poel Prize, endowed by Mrs. Gertrude W. Vander Poel, in memory of her husband, the late S. Oakley Vander Poel, for many years a professor in the College, consisting of a clinical microscope and accessories, offered to the senior student passing the best bedside examination in general medicine, was awarded to Dr. Lyle Adin Sutton.

The prize, consisting of an ophthalmoscope, offered by Dr. Merrill for the highest standing during the year in ophthalmology and otology, was awarded to Mr. John Charles Younie. Mr. William Mitchell Mallia, honorable mention.

The Townsend Physiology Prize, endowed by the late Professor Franklin Townsend, Jr., M. D., was awarded to Mr. Charles Howard Harbinson, for passing the best examination in physiology at the end of the first year of study.

Dr. Boyd's Prize to the senior student having the highest standing during the year in obstetrics was awarded to Dr. Edwin Charles Johnson.

The Daggett Prize, consisting of sixty dollars, for the best "anatomical specimens," was awarded to Messrs. Charles Ethan Allen and Joseph R. Gingold, and the second Daggett Prize, amounting to thirty dollars, was awarded to Mr. Douw Schuyler Meyers.

The Daggett first prize for the best "deportment irrespective of scholarship," consisting of sixty dollars, was awarded to Dr. John Joseph Quinlan, and the second prize, consisting of thirty dollars, was awarded to Dr. Charles Ethan Allen.

The Bigelow Prize, endowed by the late Professor John M. Bigelow, M. D., consisting of eighty dollars, offered to the senior student passing the best examination in diseases of the nose and throat, was awarded to Dr. Arthur Francis Cody.

The exercises concluded with the "Ode to Old Union" and the benediction pronounced by the Chancellor.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.
COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.
BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF JULY, 1921.

Tuberculosis	10	Bright's Disease	19
Typhoid Fever	0	Apoplexy	6
Diphtheria	2	Cancer	12
Scarlet Fever	0	Accidents and Violence	17
Whooping Cough	2	Deaths under 1 year	12
Measles	0	Deaths over 70 years	28
Diarrheal Diseases	5	Death rate (nonresidents included)	13.48
Pneumonia	1		
Broncho Pneumonia	0	Death rate (nonresidents excluded)	11.03
Influenza	0		
Grippe	0		

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Home for the Aged	..	1	Homeopathic Hospital	3	5
Academy of the Holy Name	1	..	St. Peter's Hospital	1	10
St. Margaret's Home	..	1	Albany Hospital	9	16
Brady Maternity	..	5	Public Places	1	3
Albany Hospital—Tuberculosis Camp	..	3		19	45
House of Good Shepherd	1	1	Births		200
Albany County Hospital	3	..	Still Births		10

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	2	Tuberculosis	22
Scarlet Fever	11	Mumps	9
Diphtheria and Croup	17	Pneumonia	1
Chickenpox	15	Influenza	0
Smallpox	0	Trachoma	1
Measles	9	Encephalitis Lethargica	2
German Measles	0		
Whooping-cough	44	Total	133

Number of days quarantine for scarlet fever:
Longest................ 30 Shortest................ 30
Number of days quarantine for diphtheria:
Longest................ 44 Shortest................ 12
Fumigations:
Rooms................ 45 Buildings................ 13
Milk bottles disinfected 194

Miscellaneous.

Cards posted for communicable disease	26
Cards removed	16
Notices served on schools	0
Notices served on stores and factories	6
Postal card returns sent to doctors	26
Postal card returns received from doctors	16
Inspections and reinspections	30
Vaccinations	1
Vaccination dressings	8
Children examined for employment certificates	24
Number of employment certificates issued	23
Taking specimens of blood for Wassermanns	4
Taking smears for Gonococci	3
Cultures	0
Inspections, midwives	7
Postal cards sent to milk dealers	5
Dogs examined for rabies	1
Re-examinations for rabies	1

Tuberculosis.

Living cases on record July 1, 1921		571
Cases reported:		
By card	17	
Dead cases by certificate	5	22
		593
Dead cases previously reported	5	
Dead cases not previously reported	5	
Removed	6	
Died out of town	0	
Recovered	0	
Unaccounted for	0	16
Living cases on record August 1, 1921		577
Total tuberculosis death certificates		10
Non-resident deaths:		
Albany Hospital Camp	1	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	0	
City at large	0	1
Resident deaths		9
Visits to cases of tuberculosis		144
Visits to physicians		19
Miscellaneous visits		22

Laboratory Report.

Diphtheria.

Initial Positive	32	Release Negative	58
Initial Negative	102	Unsatisfactory	5
Release Positive	37		
		Total	234

Sputum for Tuberculosis.

Positive	16	Unsatisfactory	0
Negative	41		
		Total	57

Widals.

Positive	2	Unsatisfactory	6
Negative	14		
		Total	22

Meningococcus.

Positive	0	Negative	0
		Total	0

Wassermann Tests.

Positive	40	Unsatisfactory	19
Negative	223		
		Total	282

Gonorrhoea Examinations.

Positive	24	Negative	63
		Total	87

Milk Analyses	182	Miscellaneous Examinations	1
Water Analyses	4		
Pathological Examinations	0	Total Examinations	869

Health Physicians' Report.

Cases assigned	35	Calls made	82

Division of Sanitation.

Complaints		140
Inspections		101
Plumbing	39	
Sanitary	62	
Reinspections		78
Plumbing	22	
Sanitary	56	
Garbage collected from 1st District bbls.		500
Garbage collected from 2nd District bbls.		500
Garbage collected from 3rd District bbls.		750
Garbage licenses issued		0
Licenses for ashes issued		0

HEARINGS.

Hearings	5
Cases heard	6

Class of Cases.

Odor	1
Manure	1
Chickens	1
Water	1
Horses	1
Cows	1

Disposition of Cases.

Reinspections	6

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections		102
Old houses	53	
New houses	49	
Permits issued		53
Plumbing	53	
Building	0	
Plans submitted		24
Old buildings	7	
New buildings	17	
Houses tested		26
Smoke	0	
Blue or red	5	
Peppermint	4	
Water test	17	
Houses examined		46
Re-examined		60
Valid	23	
Without cause	23	
Violations		0
Plumbers' license plates issued		1

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	19
Dogs removed	23
Cats removed	75
Total	117

DIVISION OF MARKETS AND MILK.

Public market inspections	22
Market inspections	105
Fish market inspections	15
Slaughter house inspections	1
Rendering establishment inspections	0
Pork packing house inspections	5
Hide house inspections	0
Cows examined	305
Cows quarantined	2
Cows rejected	6
Milk depots inspected	30
Inspections of stores selling milk	12
Dairies inspected	26
Milk houses examined	26
Milk cans inspected	184
Milk cans condemned	0
Complaints investigated	0

Laboratory Work Done at Bureau.

Lactometer readings	51
Temperature readings	138
Fat tests	7
Sediment tests	22

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ALBANY MEDICAL ANNALS

Original Communication

ALBANY HOSPITAL.

NINETEENTH REPORT OF PAVILION F, DEPARTMENT FOR MENTAL DISEASES, FOR THE YEAR ENDING JUNE 30, 1921.

By J. MONTGOMERY MOSHER, M. D.,
Attending Specialist in Mental Diseases.

To the Board of Governors:

I have the honor to present the nineteenth report of Pavilion F, for the year ending June 30, 1921.

There remained in the Pavilion on July 1, 1920, thirty-four patients—nineteen men and fifteen women. There have been admitted one hundred eighty-five men and one hundred forty women. The whole number of patients under treatment was, therefore, three hundred fifty-nine.

There have been discharged three hundred thirty-four patients—one hundred ninety-two men and one hundred forty-two women, and there remained in the Pavilion at the end of the fiscal year, twelve men and thirteen women.

The following tables show the forms of disease and the results of treatment for the year, and since the opening of the Pavilion:

TABLE I.—SHOWING THE FORMS OF DISEASES AND THE RESULTS OF TREATMENT FOR THE YEAR ENDING JUNE 30, 1921.

FORM OF DISEASE	Recovered		Improved		Unimproved		Died		Remaining		Total		Total
	M	W	M	W	M	W	M	W	M	W	M	W	
Acute delirium	6	3	2	1	2	...	1	3	2	...	13	7	20
Confusional insanity	1	7	8	11	9	9	...	...	4	2	22	29	51
Melancholia	1	4	4	12	3	6	1	3	2	2	11	27	38
Mania	...	1	1	1	4	5	...	...	...	1	5	8	13
Primary dementia	2	1	7	1	6	6	...	...	...	1	15	9	24
Recurrent insanity	...	...	2	...	...	1	...	...	...	1	2	2	4
Chr. delus. insanity	...	...	...	...	5	6	...	...	...	...	5	6	11
General paralysis	...	...	3	...	11	2	...	...	...	...	14	2	16
Terminal dementia	...	...	2	2	13	13	1	4	1	4	17	23	40
Idiocy and Imbecility	...	...	1	3	10	2	...	...	...	1	11	6	17
Alcoholic delirium	6	1	...	1	...	2	...	...	...	...	6	4	10
Alcoholism	...	...	25	1	2	...	...	...	...	...	27	1	28
Drug addiction	1	...	8	2	5	...	...	...	...	...	14	2	16
Neurasthenia	...	...	9	5	2	1	...	...	...	...	11	6	17
Hypochondriasis	...	...	...	...	1	...	...	...	1	...	2	...	2
Epilepsy	...	...	2	3	1	1	...	...	1	...	4	4	8
Hysteria	...	1	...	2	...	1	...	...	...	...	...	4	4
Organic brain disease	...	...	1	...	2	1	2	...	1	...	6	1	7
Cerebral concussion	1	1	...	...	...	...	...	...	...	...	1	1	2
Chorea minor	1	...	...	1	...	...	...	...	...	...	1	1	2
Meningitis	...	...	1	...	...	...	...	...	...	...	1	...	1
Tuberculosis	...	...	1	...	1	...	2	...	...	...	4	...	4
Encephalitis	...	...	1	1	...	...	...	...	...	...	1	1	2
Liver disease	...	1	...	...	...	...	...	...	...	...	...	1	1
Locomotor ataxia	...	...	1	...	...	...	...	...	...	...	1	...	1
Disease of stomach	...	...	...	...	...	...	...	1	...	...	...	1	1
Nephritis	...	...	...	1	...	...	2	1	...	...	2	2	4
Carcinoma	...	...	...	...	...	...	...	1	...	...	...	1	1
Paralysis agitans	...	...	...	...	1	...	...	...	...	...	1	...	1
Pernicious anaemia	...	...	...	...	1	...	...	1	...	1	1	2	3
Septicaemia	...	...	...	...	...	...	...	1	...	...	...	1	1
Fracture of skull	...	...	1	...	...	...	...	...	...	...	1	...	1
Exophthalmic goitre	...	...	...	...	...	1	...	...	...	...	...	1	1
Erysipelas	1	...	...	...	...	...	...	...	...	...	1	...	1
Ptomaine poisoning	1	...	...	...	...	...	...	...	...	...	1	...	1
Gangrene	...	...	...	...	...	...	1	...	...	...	1	...	1
Malingering	...	...	...	...	1	...	...	...	...	...	1	...	1
No diagnosis	...	...	...	...	...	...	...	...	...	...	1	2	3
	21	20	80	48	80	57	10	15	12	13	204	155	359

TABLE II.—SHOWING THE FORMS OF DISEASE AND THE RESULTS OF TREATMENT SINCE THE OPENING OF THE PAVILION, FEBRUARY 18, 1902.

FORM OF DISEASE	Recovered		Improved		Unimproved		Died		Remaining		Total		Total
	M	W	M	W	M	W	M	W	M	W	M	W	
Acute delirium	64	71	28	40	11	28	20	27	2		125	166	291
Confusional insanity	25	26	78	98	81	129	5	6	4	2	193	261	454
Melancholia	38	62	92	199	105	197	8	19	2	2	245	479	724
Mania	14	26	22	55	63	89	1			1	100	171	271
Primary dementia	13	11	65	48	112	71	2			1	192	131	323
Recurrent insanity	1		23	30	22	36				1	46	67	113
Chr. delus. insanity			5	9	85	87		1			90	97	187
General paralysis			22	2	138	24	8				168	26	194
Terminal dementia			72	57	225	192	52	37	1	4	350	290	640
Idiocy and Imbecility			28	29	78	68	2			1	108	98	206
Alcoholic delirium	340	22	51	9	6	4	47	2			444	37	481
Alcoholism	20	5	552	68	44	10	5				621	83	704
Drug addiction	19	13	75	65	20	9	4	5			118	92	210
Ptomaine poisoning	3	2									3	2	5
Nephritis			3	5	6	2	19	6			28	13	41
Eclampsia		1	2	1		1		1			2	4	6
Epilepsy	1		42	17	36	18	1		1		81	35	116
Neurasthenia	5	2	43	36	10	18					58	56	114
Hysteria	4	19	5	63	1	14					10	96	106
Chorea minor	2	3	1	3	2	1					5	7	12
Exophthalmic goitre				1		1						2	2
Tic douloureux				1								1	1
Hypochondriasis	1		21	2	9		1		1		33	2	35
Organic brain disease			21	12	38	11	30	15	1		90	38	128
Cerebral concussion	10	3	6		1						17	3	20
Oedema of the brain					1		1				2		2
Locomotor ataxia			6	3	7	2		2			13	7	20
Myelitis					1	2		2			1	4	5
Arthritis deformans						1		1				2	2
Meningitis	1		2	2		1	17	3			20	6	26
Multiple neuritis			1			1					1	1	2
Paralysis agitans					5	1	3				8	1	9
Hydrophobia							1				1		1
Tetanus							1				1		1
Tuberculosis			13		6	2	35	6			54	8	62
Typhoid fever	3	1									3	1	4
Liver disease		4		1			2	2			2	7	9
Pneumonia	10						27	6			37	6	43
Heart disease			5	1	4		10	3			19	4	23
Pernicious anaemia				1	1			2		1	1	4	5
Chlorosis								1				1	1
Septicaemia							2	2			2	2	4
Disease of digestive tract			1		1		1	1			3	1	4
Fracture of skull			2	1	2		5	1			9	2	11
Multiple fibromatosis								1				1	1
Erysipelas	1										1		1
Carcinoma				1	3			2			3	3	6
Strangulated hernia							1				1		1
Pleurisy			1					1			1	1	2
Malingering					2						2		2
Insolation	2										2		2
Encephalitis			2	1			1				3	1	4
Aniline poisoning	1										1		1
Influenza			1					3			1	3	4
Huntington's chorea					1						1		1
Gangrene							1				1		1
No diagnosis											45	29	74

COMMENT.

The average daily number under treatment for the year was twenty-seven. The number of beds is thirty-three. The highest number of patients at any one time was thirty-eight and the lowest, eighteen. The total number of days of treatment was 10,025, making the average duration of residence thirty days.

An incident of the year was the visit of the post-graduate school in public health, conducted at the hospital conjointly by the State Department of Health and the Albany Medical College. A preliminary lecture was given and the wards and patients were inspected by the Health Officers in attendance who expressed their approval.

The hospital year whose operations are recorded in this report has not differed from its predecessors in presenting an array of problems for solution and more or less difficult situations for management and control. Barring the decline in alcoholics the number of patients has reached the usual average and the capacity of the wards has been utilized and sometimes taxed. There have been a few more victims of intemperance than during the preceding year and these have been of particularly severe type. It is evident that some more virulent poison than alcohol is exhibited in the intoxicating beverages now in use, and the effect upon the human organism not infrequently threatens a fatal issue. Physical collapse has been much more common than in the usual forms of delirium tremens and the cases have often proved critical. An unusual death-rate has been prevented, however, sometimes by most strenuous therapeutic exertions, and this fortunate result may be attributed in part to the relatively small number of cases of pneumonia, a practically intractable complication of alcoholism. Pneumonia was prevalent during the pandemic of influenza of 1918, whose force seems to have been spent. There are some micro-organisms whose effects appear to be most severe when they attack the brain, and the bacillus of influenza, the pneumococcus and the streptococcus of erysipelas have proved unconquerable when the usual physical symptoms have been complicated by delirium. Of these infections, associated with alcoholism, may be predicated a fatal termination.

The experience with drug addictions has proved discouraging. There is no immediate, or even remote, apprehension of death, but whatever relief may be given to the importunities of the craving for opium or cocaine and their allies, has been only temporary, and has been attended by misgiving as to the sincerity of the patient and anticipation of relapse. It would seem that the statutory effort to prohibit the use of these drugs had largely the artificial support of propaganda, and originated in faith rather than in saving knowledge of the character of the individuals whom it was intended to coerce. Public clinics were organized to distribute the drugs upon a theory of the gradual reduction of the dose to be effected by the unaided and altruistic efforts of the patients themselves. These ambulatory cases were thus given an opportunity to carry away their supplies without the formality of pecuniary compensation. When this source of supply failed a few habitues entered the hospital with the expectation of continuance of the indulgence and left in high dudgeon when the drug was not forthcoming. There seemed to be no method of forcible detention, and no good could come from attempts to destroy a habit which the victim himself preferred to indulge. Absolute relief has been usually followed by recidivation, and when patients thought to have been cured returned after a brief interval, it was concluded that efforts expended in this direction were wasted, and no encouragement is now given to the admission of these cases except in the rare instances where the abuse has been innocently cultivated through ignorance or through the insistence of some painful disease, and relief is honestly desired. There is a distinct line of demarkation between an individual of this class and one whose life is given to dissipation and the associated exhilaration and stimulation which feed his pleasures. Evidence accumulates that the practice of drug-taking is prevalent in the criminal class and is to be met by the government in its jurisdiction over malefactors. It cannot be controlled nor can these people be influenced by any humanitarian appeal to honor or chastity such as a civil hospital can make.

Nineteen patients were received suffering from what are ordinarily regarded as physical diseases, but whose exhaustion or toxaemia, or whatever might have been the pathological substratum, involved mental operations of a kind to require special accommodations and care. The list includes affections of the circulatory system and kidneys, different forms of anaemia, septicaemia, ptomaine poisoning, erysipelas, gangrene, diabetes and cancer. There were two cases of injury to the head, one involving fracture of the skull. One of these arose from concussion sustained in an automobile accident, which gave no external evidence of damage, but presented a state of extreme maniacal excitement. Withdrawal of the cerebro-spinal fluid gave immediate relief and cure. This is the third instance under our observation of oedema of the brain causing mental symptoms, and suggests the possibility of an occasional morbid condition which has not been generally recognized.

There were forty-eight cases of diseases of the nervous system, including apoplexies, choreas, inflammation of the brain or its membranes, and the group of functional neuroses in which are usually placed epilepsy, hysteria, neurasthenia, hypochondria and the like. One extraordinary case of epileptiform migraine, raising several questions of medical and social importance has been made the subject of a special report.

Eighty-eight of the patients regarded as purely mental presented symptoms predicating incurability. Some of these were defectives, as the cases of idiocy and imbecility; others, the cases of general paralysis and senile decay were due to gross organic degeneration of the brain.

There remain one hundred forty-six patients whose disorder is assumed to have arisen in normal individuals as the result of stress or excessive demand upon the resources of the nervous system. Through misfortune or ignorance they have been overwhelmed and have submitted, often after a prolonged and severe struggle, to the inevitable penalty of disregard of the laws of health.

The different groups, when studied in juxta-position, as above, stimulate curiosity and provoke contemplation of the variations in human nature. The mere existence of a department in a hospital dedicated to the service of so-called mental diseases, attracts to this one focus wide and diverse groups of individuals, the range of whose characteristics covers all of the possibilities of mental deviations. This simple fact makes it plain enough that the mental manifestations are simply one form of expression of physical activities. Inflammation of the brain upon the one hand, disease of the kidney upon the other, blows upon the head, infections, whatever disturbs the ordinary course of existence involves the mind as well as the body in the morbid activities. The broadest and most humane, and, at the same time, the most scientific, conception of the conditions presented here, justifies a tolerant view of the misfortunes of which these patients are the victims.

There are first the devotees of indulgence, who yield to pleasure, heedless of the penalty. The choice, on the surface, seems to be voluntary, but who can measure in his neighbor, or even in himself, the potency of a craving or the strength of character needed to overcome temptation and resist its encroachment? Not intrinsically different are the neurasthenics and hypochondriacs, insufficiently endowed with stamina to meet the casual events of life, who succumb to fancied trouble hardly worth the name. They give no evidence of happiness in their uneasy and vacillating sojourn, unless there be gratification in the habit of complaining. Indulgence in stimulants or indulgence in fancied misery is only a variant of the expression of an impoverished nervous system. This is inherent, and may be observed in the group who have succumbed to disaster after an unavoidable contest against overwhelming odds. Long resistance against misfortune has depleted the nervous system, which finally yields, not infrequently in a violent explosion of ungovernable force, representing the limit of endurance of long suppressed tension.

The approach to understanding of all these morbid manifestations is only to be made through knowledge of the mechanism through which they are expressed. Scientific thought now turns toward analysis of the structure and function of the brain. A generation ago the word " metaphysics " began to lose its vogue, and " physiological psychology " was invoked as the basis upon which to construct a scheme of mental activities. Speculation as to the nature of mind is as abundant as through the ages, and harks back to the days of the ancient philosophers. Definite knowledge, however, has been gained of much of the structure, relations and functions of the organ of mind, and if the "why" is still a problem, the "how" is in many ways definitely disclosed.

Whatever the mind itself may be, it is evident that its operations can only be expressed through the medium of bodily action; and the converse of this proposition may be assumed: that bodily action determines mental. From this point of view the lower and simpler physical functions may be analyzed, and often, by analogy, the higher may be interpreted. The great impetus to this fundamental study was afforded by the deductions of Hughlings Jackson, a generation ago, which demonstrated nervous action to be the effect of two partly antagonistic and partly complementary exhibitions of energy, which he termed, respectively, "reflex action" and "inhibition." Reflexes are the natural response of bodily structures to stimuli or impressions received from without, as, for example, the contraction of the pupil when a bright light enters the eye. They are protective: restriction of the intrusion of light prevents injury of the optic nerve. The mechanism by which this is effected is an "arc," consisting of a sensory nerve, a motor nerve, and the end organs which they control. "Inhibition" is a higher mechanism which modifies or controls the reflex act. In its supreme manipulation it may be accepted as a demonstration of volition. If the sole be tickled the toes are flexed and the limb is drawn away from the source of irritation, in a spontaneous or reflex effort to avoid injury. If the foot be placed in cold water the impulse to withdraw may be overcome by an effort of the will. If, however, the refrigeration be extreme, to the point of pain, the reflex protective action overcomes the voluntary resistance.

The epochal deductions of Dr. Jackson originated in his observations of epilepsy and epileptiform states. There were two elementary factors in these attacks: excessive muscular activity and suspension of consciousness; that is to say, loss of the normal balance between reflex and inhibitory power. There were sufficient instances of substitution for the convulsion of apparently purposeful acts, resembling exactly the behavior of the patient in health, and yet carried on with complete unconsciousness and without subsequent memory. It is evident that certain highly developed and intricately coordinated aggregations of reflexes become habitual and operate automatically. Thus a man during an epileptic state, in complete unconsciousness, deliberately removes his clothing, writes a letter, makes a journey, or otherwise reproduces a customary practice. Probably the most extraordinary demonstration of this close affiliation of the mind and body was shown in Sir Walter Scott's production of one of his novels. " The Bride of Lammermoor " (says James Ballantyne) " was not only written, but published before Mr. Scott was able to rise from his bed; and he assured me that when it was first put into his hands in a complete shape, he did not recollect one single incident, character, or conversation it contained."

The inference is unavoidable that constant repetition of action and thought establishes certain " paths " which operate automatically, their intrinsic character being determined by the habit of the individual, and that the highest function of the brain is that of inhibition, by which in health these paths may be selected, directed and controlled. Physical inhibition thus becomes psychic reason or judgment. As, in disease, the most delicate and most intricately organized structures suffer first and most, so mental affections are characterized by disorder of reason and diminished governance of the lower automatic mechanism. The popular idea of supernatural strength may be mentioned only to be dismissed as fallacious. An outbreak of anger is manifested by thoughtless speech, flushed face, palpitating heart, and tense muscles, which represent the automatic combinations of reflex paths adapted to the expression of this emotion. Analogous are the indications of states of fear, a primal passion closely interwoven with the love of life and its preservation. Either of these emotions may be controlled and dissipated by reason, but the emotion may be overwhelming or the reason weak and incompetent.

A young woman who had presented premonitory symptoms of nervous disorder, shortly after midnight became suddenly terrified and demonstrative, so that her mother was awakened and hastened to her room. She said she had seen a young boy, her cousin, standing in the room, and that he had sunk upon the floor, dead. Her mother was unable to correct this impression or relieve her apprehension until morning when the boy was brought into her presence for ocular demonstration.

At two o'clock in the afternoon, about twelve hours after the incident, she was questioned closely and sharply, particularly as to how she could retain the impression after she had inspected the floor and had failed to see the body of the young man, and also as to why she could not accept her mother's statement upon an incident that was so palpably absurd and unreal. After some hesitation she replied that of course the incident was not in accord with reason, but that *her reason was not in operation and she could not use it.* She acknowledged the unreality and falsity of the event with reluctance, as if she were not entirely free from the terror of the preceding night—as if her fear had not yet yielded to the exercise of reason—still weakened.

This discussion is submitted as part of an annual report with some misgiving. As far as it goes it is technical, and is, of necessity, sketchy. Hughlings Jackson balanced the respective interactions of the voluntary and automatic in a very conclusive way, and this principle is capable of much wider application to mental disorders than has been given. And he was inclined to ascribe to reflex action a much higher evolution, as he wrote "that the highest, least organized, least automatic, most *imperfectly reflex* centres, are the physical basis of consciousness or of most vivid consciousness." Since that was written Professor Sherrington has published his work upon the reflexes which corroborates the Jacksonian suggestion of a possible reflex explanation of all higher nervous function.

The excuse offered for the indulgence in this fascinating theorizing is that upon some conception of the organization and physics of the nervous system must the work of the hospital be established. Disease of the mind, so-called, presents no new functions, but, by dissolution of the mechanism, reveals its different component parts and their interrelations. It emphasizes the defect of the higher voluntary relations and the irresponsibility of the patient. There can be no appeal to reason when reason is not there. It is understood, more and more clearly, as experience accumulates, that the bizarre and apparently unaccountable behavior of patients, is a reaction of some part of the nervous mechanism, and a pure physiological demonstration. To attempt correction by argument on protest is no less futile than would be an oration addressed to the stomach to carry on its processes of digestion.

The best than can be done is an arrangement, such as has been made in the architecture of the building, for reasonable segregation of patients, removal of annoyances, and determination of the physical cause of the disorder for correction. All this is sought with the minimum of friction, and the lesson is taught every day that the most humane and most successful performance of duty rests upon the clinical conception. This calls upon all the resources of the hospital, and all of the departments and the physicians and surgeons attached to them have responded liberally and enthusiastically to all demands. Confirmation of this may be found in the great variety of diseases which have presented themselves during the year.

In view of the close relationship of diseases of such varied nature, there is left little room for question of the close alliance between the mind and the body.. There is some gratification in the thought that the original conception of this department upon the theory has been justified, and that each year shows closer unity with the other activities of the hospital, and a general assimilation of all its departments into one cooperative plan for relieving the sick.

DISCHARGES.

Of the three hundred thirty-four patients discharged, forty-one recovered and one hundred twenty-eight were improved. The percentage of cases distinctly benefited was fifty-one. Since the opening of the Pavilion the percentage of cases discharged as recovered and improved has been fifty-three. One hundred thirty-seven patients were discharged unimproved and twenty-five died. The causes of death were: appendicitis, one; pneumonia, one; organic brain disease, three; nephritis,, two; pleurisy, one; gastro-enteritis, one; diabetes, one; exhaustion, two; suicide, three; tuberculosis, one; debility of old age, three; pernicious anaemia, one; carcinoma, two; gangrene, one; septicaemia, two.

Of the five thousand seven hundred eighteen patients admitted in nineteen years, three thousand one have returned to their homes.

ACKNOWLEDGMENT.

The Pavilion receives many indigent patients on the order of the Commission of Charities who is invested by statute with the power to issue a temporary order of commitment for investigation into the mental condition. The purpose of this law is the prevention of hasty action in the determination of insanity, and to give sufficient time for observation of the symptoms and their purport. It is readily seen, from examination of the statistics of the Pavilion that in many cases this legal proceeding has been avoided. The duty to these patients has always been regarded as paramount and in accord with the charitable purpose for which the Pavilion was built. In the course of time the relations of the Hospital with the City Department of Charities have become more intimate and there has developed close cooperation with the Department and with the physicians assigned to the examination of patients. This plan is probably as effective and cautious as can be desired for the solution of this important and delicate problem. To Commissioner Patton, and his Deputy, Mr. William H. Erwin, are due the thanks of the Hospital for their painstaking and cordial cooperation.

The work of the nurses has been above criticism. There may be and there are occasional errors of judgment, but there has been no instance of wilful disobedience or neglect. It is appreciated by them that this branch of training is necessary to the complete rounding out of the undergraduate instruction, not only for the knowledge gained of a special class of invalids, but also because this experience may be properly and advantageously utilized in the sick-room, no matter what the form of disease. It is believed that the attendance upon the general medical and surgical wards is better and more intelligent from the insight into the whims and fancies of the patients which arises from emphasis upon the mental phases of illness. For the training in this direction and for general effectiveness and skill in the administration of the wards too much praise cannot be given to Miss Margaret Flanagan, the nurse in charge.

Routine repairs and improvements have been made as needed, and redecoration of the rooms has been undertaken and will be carried on during the year with artistic taste characteristic of the

Superintendent of the Hospital, Mr. W. D. Rockefeller. Friends have contributed pictures and furniture, and to those disposed to assist in this benevolent work it may be excusable to suggest that gifts of easy chairs, couch pillows and the like may be used for the comfort of patients and add to the attractiveness of the bed and lounging rooms. For patients who are distracted, discouraged and anxious the relatively insignificant adornments of the building which suggest an approximation to the refinement of the home are attractive and reassuring. From time to time pictures have been hung, but one hundred more might be used to advantage.

Among the special gifts of the year, which are acknowledged with gratitude, were a bushel of apples from Mr. F. S. Jewett of Catskill, flowers from Mr. Davis, Danker the florist and Mr. George Hawley, a couch pillow from Miss Louise Walker, six books from Dr. George S. Munson, a picture puzzle from Miss Anna Nichols, and framed pictures from the estate of Mr. J. Townsend Lansing, from Mr. Harry Simmons and from Mrs. Courtenay Brandreth. The choir of St. Paul's Church on Christmas eve sang the appropriate carols under the direction of the Reverend Roelif H. Brooks and Choir-master Candlyn. The holiday season was further recognized by the Associated Charities organization of the city, who presented a pair of bedroom slippers for each woman patient, cigars, cigarettes and tobacco for the men, and candy for all.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.
COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.
BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF AUGUST, 1921.

Tuberculosis	13	Bright's Disease	12
Typhoid Fever	0	Apoplexy	7
Diphtheria	4	Cancer	12
Scarlet Fever	0	Accidents and Violence	6
Whooping Cough	0	Deaths under 1 year	18
Measles	0	Deaths over 70 years	28
Diarrheal Diseases	14	Death rate (non-residents included)	12.86
Pneumonia	3		
Broncho-pneumonia	0	Death rate (non-residents excluded)	11.03
Influenza	0		
Grippe	0		

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Albany Hospital	6	12	Homeopathic Hospital	2	4
Certified Nurses' Home	0	1	Maternity Home	1	6
Home for the Aged	0	2	St. Margaret's Home	1	3
Albany County Hospital	0	1	Incurables	1	1
Albany Hospital Tuberculosis Camp	0	2	Public Places	1	2
St. Peter's	4	4		16	38

Births	209	Still Births	6

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	4	Tuberculosis	18
Scarlet Fever	3	Mumps	1
Diphtheria and Croup	32	Pneumonia	14
Chickenpox	4	Influenza	4
Smallpox	0	Septic Sore Throat	4
Measles	0	Puerperal Septicaemia	1
German Measles	0		
Whooping-cough	27	Total	112

Number of days quarantine for scarlet fever:			
Longest	30	Shortest	30
Number of days quarantine for diphtheria:			
Longest	48	Shortest	11
Fumigations:			
Rooms	80	Buildings	19
Milk bottles disinfected			117

MISCELLANEOUS.

Cards posted for communicable disease	29	Vaccination dressings	40
Cards removed	17	Children examined for employment certificates	13
Notices served on schools	0	Number of employment certificates issued	13
Notices served on stores and factories	11	Taking specimens of blood for Wassermanns	1
Postal card returns sent to doctors	29	Taking smears for gonococci	0
Postal card returns received from doctors	17	Cultures	7
Inspections and reinspections	36	Postal cards sent to milk dealers	17
Vaccinations	63		

Tuberculosis.

Living cases on record August 1, 1921		577
Cases reported:		
By card	15	
Dead cases by certificate	3	18
		595
Dead cases previously reported	10	
Dead cases not previously reported	3	
Removed	2	
Died out of town	0	
Recovered	0	
Unaccounted for	0	15
Living cases on record September, 1921		580
Total tuberculosis death certificates		13
Non-resident deaths:		
Albany Hospital Camp	0	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	0	
City at large	0	0
Resident deaths		13

Visits to cases of tuberculosis	67
Visits to physicians	21
Miscellaneous visits	22

LABORATORY REPORT.

Diphtheria.

Initial Positive	42	Release Negative	210
Initial Negative	162	Unsatisfactory	13
Release Positive	35		
		Total	462

Sputum for Tuberculosis.

Positive	23	Unsatisfactory	0
Negative	47		
		Total	70

Widals.

Positive	3	Unsatisfactory	3
Negative	29		
		Total	35

Meningococcus.

Positive	0	Negative	0
		Total	0

Wassermann Tests.

Positive	41	Unsatisfactory	4
Negative	213		
		Total	258

Gonorrhoea Examinations.

Postive	24	Negative	43
		Total	67
Milk Analyses	210	Pathological Examinations	0
Water Analyses	12		
		Total Examinations	1,114

HEALTH PHYSICIAN'S REPORT.

Cases assigned	42	Calls made	103

DIVISION OF SANITATION.

Complaints		133	Garbage collected from 1st District ....bbls.	810
Inspections		50	Garbage collected from 2nd District ....bbls.	540
Plumbing	18		Garbage collected from 3rd District ....bbls	945
Sanitary	32		Garbage licenses issued	5
Reinspections		96	Licenses for ashes issued	3
Plumbing	30			
Sanitary	66			

HEARINGS.

Hearings	6	Cases heard	7

Class of Cases.

Filthy premises	2	Privy vault	1
Odor	1	Closet	1
Plumbing	1	Manure	1

Disposition of Cases.

Ordered for reinspection	7

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections		130	Smoke	0	
Old houses	26		Blue or red	2	
New houses	104		Peppermint	0	
Permits issued		69	Water test	35	
Plumbing	67		Houses examined		17
Building	2		Re-examined		66
Plans submitted		35	Valid	10	
Old buildings	6		Without cause	7	
New buildings	29		Violations		0
Houses tested		37			

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	12	Cats removed	74
Dogs removed	12		
		Total	98
		Cases of eggs removed	107

Division of Markets and Milk.

Public market inspections	16	Cows quarantined	0
Market inspections	106	Cows rejected	8
Fish market inspections	9	Milk depots inspected	35
Slaughter house inspections	1	Inspection of stores selling milk	24
Rendering establishment inspections	1	Dairies inspected	35
Pork packing house inspections	1	Milk houses examined	35
Hide house inspections	0	Milk cans inspected	268
Cows examined	426	Milk cans condemned	0
		Complaints investigated	2

Laboratory Work Done at Bureau.

Lactometer readings	44	Fat tests	20
Temperature readings	44	Sediment tests	25

Medical News

The Albany Guild for Public Health Nursing—Statistics for August, 1921.—1. Number of new cases this month, 181. Classified economically, free, 50; bed cases, 17; prenatal, 3; dispensary soc. service, 0; tuberculosis (pos.), (super.), 18; venereal social, 12. Paid, 131; limited means, bed cases, 86; metropolitan, bed cases, 32; metropolitan prenatal, 13; Western Union, 0. Cases carried over from last month, 627; bed cases, 90; prenatal cases, 40; dispensary soc. serv., 0; tuberculosis total, 389; venereal, 108; Western Union, 0. Classification of bed cases, medical, 54; surgical, 3; obstetrical, 47; prenatal, 16; confinements, 40; maternity, 7; miscarriages, 1; number of babies born, 47.

2. *Visits for Nurses* (all departments), 1,572; for bed care, 1,237; prenatal instruction, 110; tuberculosis (sup. and inst.), 0; venereal social, 61; general soc. service, 54; for other purposes, 61; dispensary social, 0; supervision, 49.

3. *Source of Nursing Cases.*—Metro. agts., 94; doctors, 23; nurses, 6; dispensary, 2; family or friends, 21; other sources, 5.

4. *Disposition of Bed Cases.*—Discharged recovered, 47; discharged improved, 30; discharged unimproved, 11; discharged dead, 3; discharged to other care, 10; carried, 122. Disposition of other cases: Prenatal, discharged to maternity care, 47; discharged to hospital, 3; discharged to other care, 6; carried, 26; dispensary social service, dis. dispensary care, 0; carried, 0; venereal, discharged cured, 1; discharged temporarily non ven., 2; discharged to other care, 0; carried by dispensary, 106; carried under super. care at the House of Good Shepherd, 17; tuberculosis, discharged dead, 4; discharged, left town, 2; discharged, not T. B., 0;

carried (positive), (supervision), 407. Total number of cases carried over into September, 678.

5. *South End Dispensary Report.*—Number of clinics, 97; surgical, 12; medical, 10; gynecological, 9; prenatal, 0; eye and ear, 20; venereal, 14; nerve, 5; nose and throat, 9; skin, 6; children, 8; lung, 0; children's lungs (observation clinic), 0. Clinics with doctor attending, 93; clinics without doctor attending, 4; number of new patients treated, 161; number of old patients treated, 665; total number of patients, 826. Number of metropolitan calls this month, 502; check received for last month's metropolitan calls, $198.90; check received for industrial clinics last month, 0; check received for Western Union calls last month, 0.

The Albany Guild for Public Health Nursing—Statistics for September, 1921.—1. Number of new cases this month, 171. Classified economically, free, 65; bed cases, 13; prenatal, 11; disp. social service, 20; tuberculosis (pos.), (super.), 9; venereal social, 12. Paid, 106; limited means, bed cases, 57; metropolitan, bed cases, 37; Western Union, 0; metropolitan prenatals, 12. Cases carried over from last month, 678; bed cases, 122; prenatal cases, 26; dispensary social serv., 0; tuberculosis (total), 407; venereal, 123; Western Union, 0. Classification of bed cases, medical, 70; surgical, 6; obstetrical, 29; prenatal, 23; confinements, 27; maternity, 2; miscarriages, 2; number of babies born, 29.

2. *Visits for Nurses* (all departments), 1,467; for bed care, 920; prenatal instruction, 101; tuberculosis (sup. and inst.), 60; venereal dis. instr., 0; general soc. service, 71; for other purposes, 231; dispensary social, 20; supervision, 64.

3. *Source of Nursing Cases.*—Metro. agts., 35; doctors, 67; nurses, 2; dispensary, 2; family or friends, 18; other sources, 8.

4. *Disposition of Bed Cases.*—Discharged recovered, 71; discharged improved, 21; discharged unimproved, 12; discharged dead, 2; discharged to other care, 20; carried, 121. Disposition of other cases: Prenatal, discharged to maternity care, 29; discharged to hospital, 3; discharged to other care, 6; carried, 27; dispensary social service, dis. dispensary care, 20; carried, 0; venereal, discharged cured, 0; discharged temporarily, 0; discharged to other care, 0; carried by dispensary, 46; carried under super., 70; carried under care at the House of Good Shepherd, 4; tuberculosis, discharged dead, 3; discharged, left town, 0; discharged, not T. B., 0; carried (positive), (supervision), 413. Total number of cases carried over into October, 681.

6. *South End Dispensary Report.*—Number of clinics, 79; surgical, 12; medical, 5; gynecological, 6; prenatal, 0; eye and ear, 19; venereal, 13; nerve, 4; nose and throat, 7; skin, 4; children, 6; lung, 0; children's lung (observation clinic), 3. Clinics with doctor attending, 79; clinics without doctor attending, 8; number of new patients treated, 140; number of old patients treated, 721; total number of patients, 861.

Child Welfare in Belgium.—Through the second International Conference on the Protection of Childhood, held at Brussels from July 18 to July 21, the attention of the world has been called to the program Belgium is working out for the conservation of childhood. Of timely interest is an article by Dr. Rene Sand of the University of Brussels, recently received by the U. S. Department of Labor through the Children's Bureau. How intelligence, determination, and united effort triumph over conquest, war, and famine is vividly portrayed in this discussion of "Industrial Medical Reconstruction in Belgium," which appeared in "Living Medicine."

Even during the years of occupation, when the government had left the Belgian soil and the only central coordinating agency was the voluntary "Comité National," public-health activities were started on a hitherto unknown scale, and for the first two years there was an actual decline in infant mortality. Dr. Sand accounts for this in part by the cessation of industrial work for women. The Children's Welfare League, which had begun to function to a limited extent before the war, developed in the midst of the most difficult circumstances until even the smallest village was reached.

In spite of these efforts, the average child was, at the time of the Armistice, one full year backward in normal development; the weight of the average Brussels school boy was three pounds below normal, and of the average school girl, seven pounds.

The first step in the medical reconstruction of industry was the establishment of an independent Labor Medical Service, which includes in its functions the protection of expectant and nursing working women and the care of the health of working children. The service immediately formulated a constructive program which enlisted the cooperation of all agencies concerned in the promotion of public health, including the health of working mothers and their children.

In the United States, eighteen States provide for the physical examination of every child entering industry, but no State has provided for examinations of working children at regular intervals. Belgium has adopted the advanced program of a medical examination for every juvenile not later than a month after he has entered an industrial occupation, to be repeated once a year until the child reaches eighteen, and oftener in case of disease.

Belgium has realized that health protection in the community must go hand in hand with health protection in industry, and Dr. Sand emphasizes the following points: General public health work; child welfare; housing; the restriction of alcohol consumption; and education and recreation, both for adults and children.

A national children's board has been established, which is maintained by public and private funds, and which supervises and supports child welfare organizations meeting certain conditions. The child welfare program includes the periodical free examination of children under three years of age brought by their mothers for examination; the establishment of free medical dispensaries for expectant mothers; the diffusion of knowledge relating to infant health and maternal nursing; and the supervision of boarded-out children under seven years of age. The cost of child welfare work will be borne one-half by the state, one-fourth by the province, and one-fourth by the municipality. Provincial and municipal boards are appointed by the national board, and advisory committees are provided for.

THE MEDICAL REVIEW OF REVIEWS announces change of address from 51 East 59th Street to 220 West 43rd Street, New York City.

PERSONALS.—Dr. ROBERT REID (A. M. C., '14) and Mrs. Helen Dinkle Spencer were married on September 24, 1921, at Cliff Gables, North Broadway, Schenectady. Dr. and Mrs. Reid will reside in Tarrytown, N. Y. Dr. Reid served during the war as captain of the 15th Ambulance in the Second Division.

DIED.—Dr. GEORGE TILDEN (A. M. C., '67) died at his home in Omaha, Neb., August 16, 1921, aged 79 years.

—Dr. FRANK MCRAE (A. M. C., '70) died at his home in Melrose, Fla., in August, 1921, aged 71 years.

In Memoriam

ALEXANDER LOEWENSTEIN, M. D.

Dr. ALEXANDER LOEWENSTEIN, an alumnus of the Albany Medical College of the class of 1908, died August 10, 1921, at his home in Cleveland, Ohio. Dr. Loewenstein graduated from the Troy High School in 1904. He served in the World War with the rank of captain and was stationed in Russia. He leaves his parents, his wife and one small son.

PATRICK J. HIRST, M. D.

Dr. PATRICK J. HIRST, an alumnus of the Albany Medical College of the class of 1910, died on August 9, 1921. Dr. Hirst specialized in tuberculosis and became actively identified with the public health officials of the State. He was superintendent of the Saratoga County Tuberculosis Sanitarium for several years, and just before his death assumed the same position with the Herkimer County institution. He was thirty-seven years of age.

John Henry Moon, M. D.

Dr. John Henry Moon, Cooperstown's oldest physician, died June 28, 1921, in Thanksgiving Hospital in Cooperstown, three weeks after an operation, followed by uremic poisoning.

Dr. Moon was born in Quaker Street on March 22, 1849, the son of John and Elizabeth (MacGraw) Moon. When a young man he entered the Albany Medical College, from which he graduated in 1872, and then began the practice of medicine in Rensselaerville, Albany county, later moving to St. Johnsville.

Dr. Moon was married in Rensselaerville to Harriet Bryant, who died in 1902. To them four children were born, Wallace, who died in 1909; Miss Elizabeth Moon, who has made her home with her father; John Leslie Moon of Fort Wayne and Miss Anna B. Moon, a teacher at Mt. Vernon. He is also survived by one brother, William Wallace Moon of Rochester, and three sisters, Mrs. C. H. Davenport and Mrs. C. C. Wilbur, both of Quaker Street, and Miss Elizabeth Moon of Seattle, Wash.

Bela J. Ward, M. D.

Dr. Bela J. Ward, for years a leading physician of northern New York, died on Saturday, June 25, 1921, at his home on the Albany-Troy road after an illness of three years.

Dr. Ward was born in Middleville, Herkimer county, in 1858, and was graduated from the Albany Medical College in 1881. The following year he located in Troy, where he practiced until 1906. Planning on retirement, he moved to the Albany-Troy road, but even after this his clients continued to follow him until he became incapacitated.

Dr. Ward was a member of the Albany Historical and Art Society and had a remarkable collection of antiques. He was a lover of music and fine arts and flowers, having at his home one of the best gardens in this vicinity, which attracted hundreds every year.

He attended the Protestant Episcopal Free Church of the Ascension of Troy and was a member of Mount Zion Lodge of Masons, Rensselaer Medical Society and the Troy Burns club. The only survivor is a brother, H. Judd Ward, an attorney of Troy.

Frank A. Palmer, M. D.

Dr. Frank A. Palmer was born in Lee, Mass., November 27, 1859, and died at Mechanicville, May 31, 1921. About six years before his death Dr. Palmer had an operation for renal calculus and has been in failing health ever since, although he was able to follow up partially the duties of his profession for about three years when he was compelled to retire.

Dr. Palmer was a graduate of the Albany Medical College of the class of 1882. He was for many years surgeon for the Boston and Maine and Delaware and Hudson railroads.

He was health officer of the city of Mechanicville for fifteen years, having been in active practice for many years, as he located in this city in 1883.

He was a member of the American Medical Association and the New York State and Saratoga County Medical Societies.

WM. VAN DOREN.

Current Medical Literature

SURGERY.

Nerve Injuries due to Errors in Technic in Making Intravenous Arsphenamin Injections.

DEAN LEWIS. *Journal of the American Medical Association, June* 18, 1921.

The author emphasizes the necessity of extreme care in making these injections. If the solution is injected into a nerve or the sheath surrounding it, the nerve will be severely damaged. The sloughing of adjacent tissues may render the nerve repair—spontaneous or operative—difficult or unsatisfactory. Pain radiating into the fingers when the first few drops of solution are injected is a warning that the nerve or tissue about it is being infiltrated. Two cases are reported, one of injection of the ulnar and the other of both ulnar and median nerve. A. H. STEIN.

Fracture of the Skull in Children.

J. J. MOORHEAD and W. WELLER. *Annals of Surgery, July,* 1921.

A review of one hundred cases treated by expectant or operative methods. The authors conclude that children withstand both immediate and late effects of head injury better than adults. The possibility of unfavorable complications, infections, during convalescence is greater in children. Natural resiliency of the skull reduces the severe bursting and crushing effects. In this respect head injury parallels chest injury in children and adults. From the clinical standpoint these fractures fall into the adult group after the seventeenth year. The average mortality after this age is 40-50 per cent. in fractures of the base and 50-60 per cent. in fractures spreading from the vault to the base or from the base to the vault. In children the statistics of various writers show a mortality of 10-20 per cent. in fracture of the vault, 30-50 per cent. in fracture of the base, and 30-60 per cent. in fracture involving both portions. The authors' statistics show—vault, 5 per cent.; base, 10 per cent., and combined, 11 per cent., or 26 per cent. fatalities in the series. Putting it in another way, of the fatal cases, the base was involved in 80.7 per cent. Symptoms are the same as in adults except that localization from hemorrhage is comparatively rare in children. The authors make four groups of the cases according to the severity of the injury. Death within forty-eight hours, comprising 76.7 per cent. of the mortality, was caused by the injury to the head or an associated injury; death thereafter was caused by meningitis, often pneumococcic, pneumonia and eruptive fevers, especially those developing during the first week. Only 12 per cent. of the cases were operated on. A. H. STEIN.

An Analysis of 102 *Cases of Tumors of the Breast.*

RALPH WINSLOW. *Annals of Surgery, September, 1921.*

The percentage of malignant tumors of the breast varies from 41 per cent. to 90 per cent. according to different statistics. Benign tumors rose from 32 per cent. to 59 per cent. between time of opening of the hospital to a few years ago. This is attributed to education of the profession and the public—the cases being referred at an earlier date. Of 102 cases studied, 61 were carcinomata, 3 sarcomata, 18 solid benign, and 20 cystic benign. 99 were females and 3 males; 90 were white and 9 colored; 88 married, 10 single; 4 not recorded. The left breast was affected in 56 cases and the right in 44, both breasts in one case. 92 cases were operated with three deaths; 6 were inoperable and 3 refused operation. 59.8 per cent. were carinomata, 2.94 per cent. sarcomata, and 37.26 per cent. were benign. Ages varied from 9 to 72 years. The duration averaged one year before coming under observation. Conclusions drawn are (1) Carcinoma occurs in 60-65 per cent. of all malignant tumors. (2) Tumors are coming under observation sooner than formerly. (3) Sarcomata include 3 per cent. of malignant tumors and should be so treated. Non-malignant tumors comprise 35 per cent. of all cases. All tumors should be excised as soon as noticed either in young or old. They sooner or later tend to become malignant. (5) All doubtful tumors should be examined under a microscope at the time of operation.

ARTHUR H. STEIN.

Surgical Aspect of Tumor of the Brain.

MILES F. PORTER...*Annals of Surgery, September, 1921.*

The morbidity and mortality caused by all tumors of the brain, meninges or inner aspect of the skull result largely from increased intracranial tension, either local, general or both. The pressure phenomena are mechanical in origin. About 6 per cent. of tumors of the brain per se can be removed surgically. A much higher percentage of cases can be relieved by surgery of pain, impairment of sight and mental state, and danger to life. Simple decompression often gives better results than removal of the tumor. It has benefited patients who have become comatose. Palliative treatment of tumors diagnosed as gummata should not extend beyond four to eight weeks. "Avascular gummata respond to antiluetic treatment only after pressure has been relieved." (Mac Ewen)

It is possible to have remission of symptoms in tumor of the brain and changes may occur very rapidly. It is better to perform a decompression as soon as a probable diagnosis is made. Marked changes in the eye grounds should not be awaited. After decompression or exposure of an inoperable tumor, X-ray or radium should be used as they have given encouraging results. The exploring needle is of value in locating subcortical tumors. ARTHUR H. STEIN.

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Original Communication

THE AMERICAN CHILD HYGIENE ASSOCIATION AND THE DEVELOPMENT OF THE CHILD HYGIENE MOVEMENT.

Presidential Address at the Twelfth Annual Meeting of the American Child Hygiene Association, New Haven, Conn., November 2-5, 1921.

BY HENRY L. K. SHAW, M. D.,
Albany, N. Y.

The American Child Hygiene Association meets today on historic ground. Twelve years ago, in this city, our Association came into existence as a crystalization of a country wide but unorganized sentiment demanding the protection of infancy—a square deal for the baby. The need for such an organization was discussed in Chicago in the Spring of 1908 at a meeting of the American Academy of Medicine. A committee was appointed with power to arrange and conduct for the Academy, a Conference on the Prevention of Infant Mortality, the purpose being primarily to direct public attention to this problem by bringing together the experience of various social agencies dealing with it. This proposed conference was held in New Haven on the 11th and 12th of November, 1909. At its close this Association, under the name "The American Association for the Study and Prevention of Infant Mortality," formally came into existence with the adoption of a constitution and election of officers. It is of interest to note that of the twenty-nine original directors ten now serve on the board and the executive secretary and treasurer still remain in office. The objects of the Association as stated in the constitution were:

I. The study of infant mortality in all its relations.

II. The dissemination of knowledge concerning the causes and prevention of infant mortality.

III. The encouragement of methods for the prevention of infant mortality.

The name of the Association was changed to that of the American Child Hygiene Association in January, 1919, in recognition of the fact that its problem was not alone one concerned with infant mortality but that its scope had broadened and included the welfare of the child from conception to adolescence. The objects under this wider program can be restated as follows:

I. The study of child hygiene in all its phases.

II. The dissemination of knowledge concerning child and maternal hygiene and the methods of preventing mortality and morbidity among children.

III. The stimulation and encouragement of measures for promoting the health of mothers and children.

In order to determine the influence which this Association has exerted on child hygiene activities in this country and to what extent its objects have been attained, we should glance briefly at conditions as they existed in the United States prior to 1908 and compare them with the situation in 1920.

When Dr. Helen Putnam of Providence presented the resolution in 1908 at the Chicago meeting which led to the formation of this Association, there were no organized efforts to combat the very high infant mortality in the cities of this country. There had been some spasmodic, crude and widely separated attempts, but there was no system, no coordination and no medium for the interchange of ideas and methods. Most of the work consisted of supplying modified and pure milk for babies, and this was carried on largely by private agencies and in only a few cities was money appropriated for this purpose by the municipality. At that time no city or state health departments had divisions of child hygiene. There was no prenatal or preschool age work and medical school inspection consisted almost entirely in excluding contagious disease and making perfunctory physical examinations which had little effect in improving the health of the child.

The vital statistics for births, still births and deaths under one year of age were reliable in only a very few of the large cities. The United States Census Bureau had no recognized birth registration area and in eight states where birth registration was fairly complete the infant mortality rate in 1910 varied from 108 to 168 per 1,000 living births for the same period. This same year the Census Bureau estimated the infant mortality rate for the entire United States as 149. For the sake of comparison the rate for England for 1910 was 109 and in New Zealand the infant mortality rate was only sixty-five.

Such was the general situation at the time of the first New Haven meeting. In marked contrast is the situation at the time of this second New Haven meeting.

The United States Public Health Service previous to the organization of this Association had been engaged in pioneer work in improving conditions which affect the environment of the child, such as controlling the spread of epidemics, safeguarding the milk supply, etc. Later it became interested in the health of the child and the prevention of defects. A number of excellent popular educational leaflets on Motherhood, feeding, malnutrition, etc., have been published and given large circulation. A pamphlet on the care of the baby prepared by a committee of this Association was printed as a supplement to the Public Health Reports and has been widely distributed. There has always been close cooperation and affiliation between the Public Health Service and this Association. This work is now largely under the personal direction of Dr. Taliaferro Clark whose practical knowledge of child hygiene work and administrative ability have made this branch of the Public Health Service a factor in the solution of child hygiene problems in this country. This Association was honored by having Dr. Clark its official representative at the London Conference on Infant Mortality last July.

There is the most active and energetic Federal Children's Bureau which was created in 1912 for the purpose of " investigating and reporting on all matters pertaining to the welfare of children and child life among all classes of people." Under the effective leadership of Miss Julia Lathrop who has just resigned after nine faithful years of service, this Bureau has taken a foremost part in child hygiene work in this country. President Hadley of Yale University in conferring the honorary degree of Master of Arts upon Miss Lathrop in recognition of her services in Child Welfare referred to her as "a fearless humanitarian whose career is a public blessing."

Thirty-eight states have special divisions of Child Hygiene in the State Department of Health showing that these States now recognize their duty and obligation to the children of the coming generation. These divisions are concerned with educational work and in promoting, supervising and protecting the health of babies, expectant mothers and little children. Forty-five cities now have special divisions of child hygiene to guard the interests and the health of its future citizens. New York City in August, 1908, was the first to establish such a division and Dr. S. Josephine Baker was placed in charge. Dr. Baker has achieved international reputation as a result of her administration of this Division. She blazed the trail and did pioneer work which served as a model for municipal and state divisions of child hygiene which were organized later. Dr. Baker was President of this Association during the trying days of the war and its existence today is largely due to her earnest work and zeal which carried it through that stormy period. The results achieved in New York are shown by the fall in the infant mortality rate from 144 in 1908 to eighty-five in 1920, a reduction of fifty-nine points in twelve years.

Other cities followed New York's example with striking results. Boston with an infant mortality of 148 in 1908 reduced it to 101 in 1920. Philadelphia with 144 in 1908 had an infant mortality of ninety-one in 1920. Cleveland with 150 in 1908 had eighty-seven in 1920. Buffalo with 143 in 1908 reduced it to 103 in 1920 and Detroit with a high score of 181 in 1908 was able to bring this figure down to 104 in 1920.

Dr. Holt in an address before this Association asked "Does God fix the death rate? Once men were taught so, and death was regarded as an act of Providence, often inscrutable. We are now coming to look upon a high infant death rate as evidence of human weakness, ignorance and cupidity. We believe that Providence works through human agencies and that in this field, as in others, we reap what we sow—no more and no less." The results accomplished in these cities through " human (child hygiene) agencies " verify Dr. Holt's statement and are a challenge to other cities in the country.

The Census Bureau now has a birth registration area embracing twenty-three states in which at least ninety of the births are reported and the estimated infant mortality rate for the entire United States in 1920 was eighty-six a drop of sixty-three points or forty-two per cent. in ten years.

The increase in the number of local child hygiene societies which are affiliated with this Association is most gratifying. Thirty-three affiliated societies and 503 members joined the Association in 1910, the first year of its existence. The Association has always sought the cooperation of these local societies and it is most encouraging to note that we now have 273 affiliated societies and 2,003 members. This is very definite proof that the Association has not been found wanting when weighed on the scales of service.

We have seen that very little child hygiene work was being done in the United States prior to 1908. In Europe, however, the awakening took place much earlier. France has always taken the lead in the organization of public and private activities for the reduction of infant mortality.

Professor Marfan of the University of Paris calls attention to the fact that the Société de Charité Maternelle was founded in Paris in 1784 by Madame de Fougeret, the aims of which were to prevent abandonment of children, to assist mothers during confinement, to aid them in the care of the infants and to protect the infants from the evils that menace them. It is interesting to note that this society is still in existence.

The Société Protectrice de l'Enfance was organized in Paris in 1876 to encourage maternal nursing, watch over infants sent out to wet nurses and instruct the mothers in the care of children. In the same year the Société de l'Allaitement Maternel was formed with the object of giving aid to mothers while nursing their babies.

The French Parliament passed a law in 1874 called the Roussel law after its introducer, which among other provisions contains a clause destined to encourage breast feeding in that no woman could take a position as wet nurse until her own child was seven months old or breast fed by another woman. It also gave the public authorities power to inspect the surroundings of any child under two years of age placed out to board by its parents. This law was the first instance of state intervention in the supervision of infants not committed to public charity.

Day nurseries have been popular in Europe for many years and the first Day Nursery of which we have any record was established in Paris in 1844. Mrs. Arthur M. Dodge, President of the Federation of Day Nurseries, gives a most interesting account of the origin of the Day Nursery idea. " A renowned Protestant pastor, Johann Oberlin, traversing one of the little villages of his native Vosges, on a bright harvest day in 1769, heard from a hut a chorus of childish voices. Entering he found a group of children seated around a girl of eighteen, who sang while spinning her thread. She was caring for the little ones whose mothers were in the fields. He grasped the conception of a social institution and engaged this girl, Louise Scheppler, to organize in his presbytery " Une Garderie," where during working seasons children between the ages of fifteen days and three years might be cared for while the parents were at work."

Improper feeding and impure milk were considered the chief causes of infant mortality in the latter part of the nineteenth century. For this reason the early attempts to remedy this condition were to provide sterile modified milk for babies. The credit of first providing free distribution of modified milk for infants belongs to the United States as the Good Samaritan Dispensary in New York in 1889 under the direction of Dr. Koplik, furnished such milk to needy infants. The first attempt in Europe was made three years later in 1892 by Dr. Variot at the Belleville Dispensary in Paris. Two years later Dufour in Fécamp established a depot for babies' milk as a separate institution not connected with a hospital or dispensary and gave it a striking and original name, " Goutte de Lait." The idea of advising and instructing mothers originated in 1890 with an obstetrician, Professor Herrgott of Nancy. He required the babies born in his obstetrical hospital to be returned for examination for one month after birth and if the progress was satisfactory the mother received a gift of money. Professor Budin at the Charité Hospital in Paris established in 1892 the first Consultation de Nourrissons. He developed and extended the idea of Professor Herrgott and had the babies brought to the Consultation once a week until the baby was a year old. He emphasized the importance of breast feeding and made a point of instructing the mothers in how to properly care for their babies. Budin instructed and advised the mothers while Dufour supplied modified milk for the babies and advice for the mothers. It was Budin who said that the Consultation was worth just as much as the one at the head of it.

The results compared with unsupervised babies were so striking that new Consultations and Gouttes de Lait sprang up all over France. At a meeting of the French Academy of Medicine one of the speakers stated that Professor Budin had been the means of saving a battalion from the slaughter field of infancy. Dr. Simpson of London, in commenting on this in 1906, wrote in prophetic words, " If, in the days of the rising generation, folly should be allowed to override wisdom, and the dogs of war howl down the counsellors of peace, the place that France would take on emerging from a great world strife might depend largely on the strength of Budin's battalion."

The seed sown by Koplik, Variot, Budin and Dufour fell on fertile ground and similar efforts were soon started in nearly every civilized country. In the process of evolution the educational features were emphasized and the provision of milk became less important. Today the mother brings her baby to the center for examination and advice and not for milk, for what she can learn and not for what she can get.

The discussion of methods, the recording of results and the interchange of ideas are greatly facilitated through national and international organizations and conventions.

The first national organization directed to the reduction of infant mortality was founded in Paris in 1902. This was called the Ligue contre La Mortalite Infantile. The aim of this Ligue was to develop agencies already in existence and to create new ones to lower the death rate of babies. In 1903 the Ligue Nationale Belge pour la Protection de l'Enfance du Premier Age was established in Brussels. The Deutsch Vereinigung fur Sauglingschutz was formed in Berlin in the Spring of 1909 a few months before the organization of this Association.

In England a National Conference on Infant Mortality was held in London in June, 1906, and was the first serious attempt to bring to the attention of the public the deep significance of the unnecessary loss of Great Britain's prospective and potential citizens. This Conference met with such great interest and support that others have been held in 1908, 1913, 1914 and 1921.

The first International Congress concerned with infant hygiene was held in Paris in 1905. Surely the baby was coming into his own when he was considered of enough importance to be the subject of an International Congress. The second Congress was held in Brussels in 1907 under the name Congress pour le Protection de l'Enfance du Premier Age and was of great value in stimulating public interest in the protection of child life.

The Third International Congress was held in Berlin in 1911 and at this meeting it was planned to hold a Congress every four years, but this plan could not be carried out on account of the war. At the first Congress a committee was appointed to organize an International Union for the Protection of Infants under One Year of Age.

It is now over ten years since an International Conference has been held. It is long past time for the Fourth Congress and would it not be most appropriate for this Association on behalf of all the child hygiene activities in the United States to extend an invitation to the International Union to hold its next Congress in this country? Our Government has invited the nations of the world to attend a conference on disarmament, to end the horrors and slaughter of war and reduce the number of men in arms. It would seem appropriate that an International Conference be called to discuss child hygiene and combat infant mortality and to save the lives and increase the number of babes in arms.

It is unfortunate that confusion has arisen between the terms Child Hygiene and Child Welfare. Child Welfare devotes its activities to the problems of delinquency, dependency and moral and mental deficiency while child hygiene concerns itself with the mental and physical health and health problems from infancy to adolescence. The terms as now employed are not synonymous or interchangeable as each refers to a separate and distinct line of endeavor.

The increase of child hygiene activities during the past twelve years both in this country and in Europe has been phenomenal. The modern child hygiene center marks the most striking advance in our campaign against infant mortality and morbidity during the past decade. This has changed from a place where only milk was distributed to a well-organized center from which radiates instruction and advice not only for the baby but the prospective mother and the little toddler. The support of these centers is now very largely carried on by public funds while twelve years ago the few then in existence were practically dependent on the uncertainties of private philanthropy.

The municipalities—even the National Government itself—had not been aroused twelve years ago to the tremendous social, economic and political importance of saving the babies of the nation. Public health and sanitary reforms which had been so successful in the past fifty years in reducing the general death rate and controlling epidemics were considered sufficient to reduce the infant mortality. Such measures as the control of water supplies, improved methods of sewage disposal, supervision of the milk supply, cremation of garbage and wastes and other sanitary reforms exerted no appreciable effect on the infant death rate. The environment had been improved at great effort and expense as has been pointed out by Dr. Eric Pritchard of London, but still the babies died. The problem was not solved until the necessity of instructing and dealing with the individual mother and her baby became recognized.

England's pride in the physical strength of her young manhood received a severe jolt during the Boer War when it was found that a majority of the recruits were physically incapacitated for military service. When searching for the cause they looked into the school age period and found the defects existed before the boys entered school and that they were present even in infancy.

They finally discovered that the prenatal period must be guarded and supervised and proper obstetrical facilities provided in order to prevent physical defects and debility and to insure a stronger and more enduring manhood in the next generation. This conclusion was voiced by John Burns at a meeting of the English Conference on Infant Mortality when he said, "Give us good motherhood and good prenatal conditions and I have no despair for the future of this or any other country. I believe that what the prenatal condition of the mother is, so her offspring will be. The stream is no purer than its source. Let us glorify, dignify and purify motherhood by every means in our power." Tennyson voiced the same sentiment.

> "The woman's cause is man's. They rise or sink
> Together. Dwarf'd or Godlike—bond or free:
> If she be small, slight natured, miserable
> How shall men grow?

To develop and encourage prenatal work has always been an important part of our program and the rapid spread of this work not alone in the cities but also in the country districts is largely the result of educational propaganda launched by this Association. The prenatal clinic today is an integral part of the functions of a child hygiene center and it was unheard of twelve years ago.

For the first few years the efforts of the Association were chiefly directed to awakening the American people from their lethargy and indifference towards the unnecessary loss of infants' lives. Baby Saving shows were held in nearly all of the large cities and the Association prepared a traveling exhibit which it loaned to the smaller communities. Newspaper articles, lectures and demonstrations were used in arousing public sentiment and in urging communities to establish child hygiene centers. When the Association was formed there were only forty-three infant milk depots in thirty cities according to a Survey made in 1910 by the United States Public Health Service. Today it is impossible to obtain reliable data concerning the number of child hygiene centers in the United States but in New York State there are now 185 centers in active operation in fifty-seven communities of which over eighty per cent. receive municipal aid. We cannot pride ourselves on our progress when we compare them with what has been done in Europe. There were in England, Scotland and Wales about 250 child hygiene centers in 1914 and the infant mortality was 105 while in 1920 there were nearly 2,000 centers and the infant mortality rate was eighty. Belgium has set us a wonderful example and René Sand, an honorary member of this Association, describes the situation very clearly. " War broke out and the future of the race was imperilled. The need to protect children became urgent and in the midst of the most difficult circumstances, German tyranny, scarcity of supplies, difficulty of transport and scarcity of hands, there sprang up a child welfare organization which reaches the tiniest villages and surpasses anything ever dreamed of in time of peace. In 1914 we had in Belgium seventy infant welfare stations; there are now (1920) 768 and they have distributed over a billion gallons of milk mostly to the mothers as eighty-three per cent. of the children were breast fed*** The results were quickly felt; instead of increasing, infant mortality diminished in the occupied parts of Belgium." The infant mortality rate for 1914 was 151 and eighty-two in 1919.

The past twelve years has seen a decided change in sentiment among physicians in regard to social medicine and child hygiene work. Medical men were so concerned with the study of the sick child they gave but scant attention to the well child or to measures directed to keeping him well and preventing disease and defects. Medical school students were taught little or nothing about infant mortality and its prevention except perhaps the number of deaths from disease and malformation. This led them to attach an exaggerated importance to disease and pathologic changes.

The American Pediatric Society was organized in 1889 for research and scientific study of disease in children and its members showed but little interest in child hygiene and for many years no papers were presented on the subject. Several years ago there came a change in sentiment and papers on different phases of child hygiene were read and freely discussed. This change of sentiment may have been due to the fact that twenty of its members are Directors of our Association and five have held the office of President. Three years ago a special Committee on Child Hygiene was appointed by the Pediatric Society. This Committee prepared a syllabus on Child Hygiene which has been accepted and adopted by many medical colleges. The influence of this teaching will be far reaching and today the young doctor enters upon the practice of his profession with a working knowledge of child hygiene and preventive medicine and capable of taking charge of a child hygiene center and instructing the mothers how to keep their babies well.

A further example of the change in medical sentiment towards child hygiene work is seen in the action of the British Medical Association which appointed a committee to investigate and report on the value of child welfare work. This Committee submitted its report at its 1920 meeting and among the conclusions were: That child hygiene activities have contributed in an appreciable degree to the reduction of infant mortality: That the effect of many of the causes of infant mortality can be lessened by the education of women at the centers and in their homes; That the primary object of child hygiene centers should be educational, preventive and advisory and that no treatment be administered.

Parallel with the change of sentiment in the medical profession has come a similar advance in the nursing profession. The nurse carries the lamp of knowledge into the homes which ignorance has darkened. Her work is done in the first line trenches where it often merits the distinguished service medal.

The first program of this Association states that " membership is open to all who are interested in the baby. It is not limited to physicians, investigators, nurses, social workers or associations which deal directly with the problem of preventing infant mortality, but it is hoped that the fathers and mothers of the children who are getting a square deal will consider it a privilege to further the cause of less fortunate children."

The initial period in child hygiene work was chiefly medical and this Association had its origin in the American Academy of Medicine.

The period of study and investigation appealed more strongly to what might be termed the professional group comprising physicians, health officers, nurses and social workers.

The Children's Bureau, with the assistance of women's clubs throughout this country, organized a campaign in 1918 "to save 100,000 babies and get a square deal for children." It was designated Children's Year. This was made a nation-wide weighing and measuring test for young children. Millions of children were examined and a great popular stimulus was given to all child hygiene movements. At the close of the year a Conference on Child Welfare standards was held under the auspices of the Children's Bureau. European experts were invited as well as the leading authorities in this country. A series of standards for both child welfare and child hygiene programs were adopted after a full discussion at the Washington Conference and at eight others in different sections of the country.

The present period in Child Hygiene work is characterized by the entry of large numbers of lay workers, a non-professional group, in the work of child hygiene. One of the results of Children's Year was to interest thousands of women in this great subject. Mothers' clubs, parent-teachers' associations, women's clubs and other societies are now taking active part in some phases of work in behalf of children and they should not only become identified with this Association but take a leading part in planning and carrying out its program. The professional group has been in control too long. The board of directors number eighty-five and at present sixty-five are physicians, six nurses, eight social workers and there are only six non-professionals. This is not a healthy division; in fact it is pathologic and might be diagnosed as pernicious professionalism and a transfusion of laity is necessary to sustain its life and enable it to fulfill its responsibilities.

David Starr Jordan once said, "There is nothing in all this world so important as children, nothing so interesting. If you ever yearn to be wise, study children. If you ever wish to go in for some form of philanthropy, *Do* something for children."

This is the appeal today. Do something for children. There is a place for everybody in the Association. Volunteer workers and societies with the best intentions and greatest willingness need to have counsel and advice from persons trained in child hygiene work. This Association has trained and experienced workers who go into various localities and after studying the conditions give the lay workers the benefit of their knowledge and experience.

The popularity of doing something for children is shown by the existence of no less than sixty-four national organizations directly interested in some phase of child hygiene work. There was no team work and all worked independently and often in ignorance of what the others were doing. A centralized administrative control was necessary to give expert and scientific direction. This was accomplished a little over a year ago when the National Child Health Council was formed. The creation of this Council is one of the most progressive steps in child hygiene work in recent years. The Council is now engaged in bringing about closer cooperation and coordinating these various activities so that child hygiene work in the future will be conducted with greater efficiency and less wasted effort.

It would seem that the time has arrived for consolidation of a number of organizations having similar purposes and policies. Many of the societies are striving for members and struggling for existence. A consolidation would be in line of good business methods and would result in greater economy and prevent duplication and overlapping of efforts and aid in the development of new plans and methods.

Two years ago the Association, under the able leadership of Dr. Van Ingen, was launched into a sea of broader usefulness and wider endeavor. The work up until this time had been carried on largely by correspondence and through an annual meeting. The new program includes the services of a full time general director, a traveling field director, publishing the monthly journal, "Mother and Child," and increasing the executive and administrative staff. The chief functions of the Association under this new program in brief are: to investigate state or local needs along child hygiene lines, to formulate practical working plans to meet these needs, to demonstrate the possibilities of constructive activities, to assist in their promotion, and to foster education in child hygiene among parents, students, nurses, physicians and the general public.

We must now have the active and enthusiastic cooperation of each member in order to attain our purpose under the new policy we have adopted. We can no longer rely on the efforts of the officers of the Association if we are to arouse the Nation to its responsibility towards its young children and stimulate its efforts to improve their condition. The growth and influence of this Association are largely dependent on the number and devotion of its members. We need more—many more—members and affiliated societies and we can render no greater service to the Association than by increasing its membership through personal solicitation. Much has been accomplished in the past twelve years, but we stand only on the threshold of possibilities in child hygiene. Before us exist many unsolved problems offering vast opportunities for service. Herein lies our duty, our responsibility, our inspiration.

Let us therefore both as individuals and as members of the American Child Hygiene Association strive to meet our obligations to the coming generation and to bear in mind that it is not the will of the Father in Heaven that one of these little ones should perish. Charles Kingsley once said that these words may have a physical as well as a spiritual meaning and that too often it is stupid indulgence, stupid neglect and stupid ignorance and not the will of God that brings these little ones to an untimely end.

Clinical and Pathological Notes

Reports from the Roentgen-ray Department of the Albany Hospital. By John M. Berry, M. D.

The tenth and eleventh conferences of the Roentgen-ray Department were held during the months of April and May, respectively; cases were presented by Dr. Berry and Dr. Howard; at one of the conferences Dr. Witter of Schenectady showed roentgenograms of the stomach taken with a Potter-Bucky diaphragm and Dr. McMinn of Schenectady presented a roentgenogram of a chest that showed the possibility of a pulmonary infarct. He also showed roentgenograms of a case of emphysema and pneumothorax.

The cases presented at the conferences by Dr. Howard were as follows:

Clinical Diagnosis.—Stone in the left kidney.

The roentgenograms in this case showed an enlarged left kidney, with a stone in the left ureter opposite the spine of the ischium. A barium enema was given in this case and it showed a downward displacement of the splenic flexure of the colon to a lower level than the hepatic flexure.

A diagnosis was made of stone in the ureter with hydronephrosis.

Later the patient passed the stone.

Roentgen-ray experience shows that, from the character of the pain, it is practically impossible to diagnose as to whether a urinary stone is in the pelvis of the kidney or in the ureter.

Clinical Diagnosis.—Pulmonary abscess.

The patient was thought to have tuberculosis of the lungs and was not doing well, but repeated examinations of the sputum were negative for tubercle bacilli. The temperature curve suggested the possibility of a septic focus.

Roentgenograms showed a small abscess, about three (3) centimeters in diameter present in one lung. Stereoscopic roentgenograms served to localize the abscess accurately; a needle was inserted and pus withdrawn. Later, an operation was performed, the abscess drained and the patient recovered.

Among other things this case illustrates the great advantage of stereoscopic roentgenograms in some lung conditions.

Clinical Diagnosis.—Pneumonia with complicating septicemia.

Roentgenograms in this case showed an interlobar empyema between the upper and middle lobes of the right lung. The patient was operated upon and the presence of the interlobar empyema was confirmed, the empyema cavity was drained, but the patient died from septicemia.

Clinical Diagnosis.—Acute abdominal condition, pain in the upper right quadrant, probably gall stones.

Roentgenograms showed a localized effusion (empyema) at the base of the right lung. The empyema cavity was drained and the patient recovered.

The roentgen-ray examination was of great value in this case, in differentiating between a thoracic and an abdominal condition.

Clinical Diagnosis.—Subcutaneous emphysema.

At a previous conference a case had been shown where a mistake in diagnosis had been made. The case was one of subcutaneous emphysema and pneumothorax and a diagnosis had been made of tuberculosis of the lung on account of an apparent area of diffuse consolidation throughout the lung.

The present case was one of fractured ribs, complicated by pneumothorax and subcutaneous emphysema. With this case it was easy to demonstrate that the appearance of consolidated areas over the lung was due to the shadow of the air infiltrated tissues, super-imposed on the lung shadow. The appearance was very deceiving until the proper interpretation was known.

A stereoscopic chest plate would probably have cleared up the diagnosis in the first place.

Clinical Diagnosis.—No definite diagnosis. The patient had been under the care of many excellent physicians without a definite diagnosis.

In a routine x-ray examination it was found that there was an enormous dilatation of the stomach with pyloric obstruction. There was a marked six and twenty-four hour retention in the stomach. A roentgen-ray diagnosis was made of indurated ulcer of the pyloris.

The patient was operated upon and was found to have an old perforated pyloric ulcer; the perforation extending into the pancreas. A posterior gastro-enterostomy was performed with complete recovery and relief of symptoms.

Clinical Diagnosis.—Indefinite lung condition.

Stereoscopic roentgenograms showed what was apparently a calcareous change in the pleura. A very unusual and interesting picture.

Clinical Diagnosis.—Hydropneumothorax.

Migration of the gas bubble shown by roentgenograms, by placing the patient first in the upright position and then in the lateral position.

Clinical Diagnosis.—Enlarged heart.

Two roentgenograms were shown, one taken sixteen days after the other. During the sixteen days period, a very marked enlargement of the heart had taken place.

Clinical Diagnosis.—Abdominal carcinoma.

Roentgen-ray diagnosis—Carcinoma of the duodeno—jejunal junction, with implantations in the pelvis or tubercular peritonitis. The above diagnosis was based on an obstruction found in the duodenum and the fact that the transverse colon was fixed in the pelvis.

The patient was operated upon and a general carcinomalosis was found. The primary growth was not localized.

Clinical Diagnosis.—Stomach trouble.

In this case a most unusual and interesting condition was found. Apparently a large pouch communicated with the esophagus in the posterior mediastinum. This pouch filled only when the patient was in the right lateral position. The pouch did not communicate with the stomach. It measured 11 cm in diameter. It was probably congenital in origin.

The cases presented by Dr. Berry were as follows:

Clinical Diagnosis.—Stone in the bladder.

The roentgenogram showed the shadow of a large stone, nearly circular in outline and somewhat larger than a silver dollar. The shadow of a second, much smaller stone also shown.

The stones were removed at operation and were shown at the conference.

Clinical Diagnosis.—Obscure abdominal condition.

The Roentgen-ray diagnosis was a large deformed cecum.

At operation there was found a tubercular salpingitis, a pelvic peritonitis, etc.

The case illustrated that at times both physical examination and roentgen-ray examination fail to make a correct diagnosis.

Clinical Diagnosis.—Bursitis.

The patient complained of pain and stiffness in the shoulder, the duration of trouble being about a year. Roentgenograms showed what appeared to be a diffuse and extensive calcareous deposit in the region underneath the acromion process. This case was operated upon and a calcareous deposit, the extent of which corresponded to the shadow seen in the roentgenogram was found.

This case is of interest in connection with somewhat similar cases shown and discussed at a previous conference, and made the subject of a special article appearing in the Albany Medical Annals for February 1921.

Clinical Diagnosis.—Sciatica.

The patient presented a typical history of sciatica and an x-ray examination was ordered to determine if possible the cause of the sciatica.

A roentgenogram of the pelvis of the patient was made and this showed a large, sharp spur about 1 cm. in length, projecting into the sarco-sciatic notch in the region of the sciatic nerve.

This was, naturally, thought to be the cause of the sciatica and its removal was advised.

Later, however, the patient was found to be suffering from a rapid growing sarcoma involving the sacral nerve roots.

This case illustrates how easy it is to make an error in diagnosis, by accepting the first pathological finding as the cause of all the trouble present.

Clinical Diagnosis.—Pyloric obstruction.

The patient was a baby who presented symptoms of pyloric stenosis. The roentgen-ray gross findings were difficult to interpret; the pyloric end of the stomach seemed markedly distorted, but some barium went through.

At operation it was found that the second portion of the duodenum was constricted by adhesions.

Clinical Diagnosis.—Gall bladder trouble.

The roentgenogram showed what appeared to be an enlarged gall bladder and this diagnosis was confirmed by operation.

Clinical Diagnosis.—Pleurisy with effusion.

One of the points in the diagnosis of pleural effusion by the Roentgen-ray is that the roentgenogram shows that the heart is pushed over toward the side opposite the effusion.

In this case the shadow of the effusion was very distinct, but the heart was not pushed over.

The diagnosis of effusion was confirmed by aspiration.

The heart is not always pushed over by a pleural effusion.

Clinical Diagnosis.—Wrist injury.

The patient gave a history of having injured the wrist several months ago and of suffering from pain and weakness and stiffness in the wrist ever since. The roentgen-ray examination revealed an old fracture of the scaphoid bone of the wrist with displacement forward of one of the fragments. This is a fairly common injury and may be unrecognized by physical examination alone. A fall on the hand, such as produces a Colles' fracture, is the usual cause of the injury and when on examination no Colles' fracture is found a diagnosis of sprained wrist may be made.

There would seem to be evidence for the belief that frequently there is no displacement of the fragment at first, the dislocation of one fragment occurring later with use of the wrist.

It is very important to make roentgen-ray examination of all wrist injuries.

Clinical Diagnosis.—Wrist injury.

Patient was injured in an automobile accident. He was injured in one shoulder, elbow and knee. One wrist was also injured but the other injuries were so much more severe that practically no attention was paid to the wrist. The shoulder, elbow and knee cleaned up, but the wrist became painful and stiff and now the patient claims permanent disability of the wrist and demands several thousand dollars' damage.

A stereoscopic roentgen-ray examination shows a partial dislocation of the trapezoid bone and also the base of the second and third metatarsal bones.

Clinical Diagnosis.—Wrist injury.

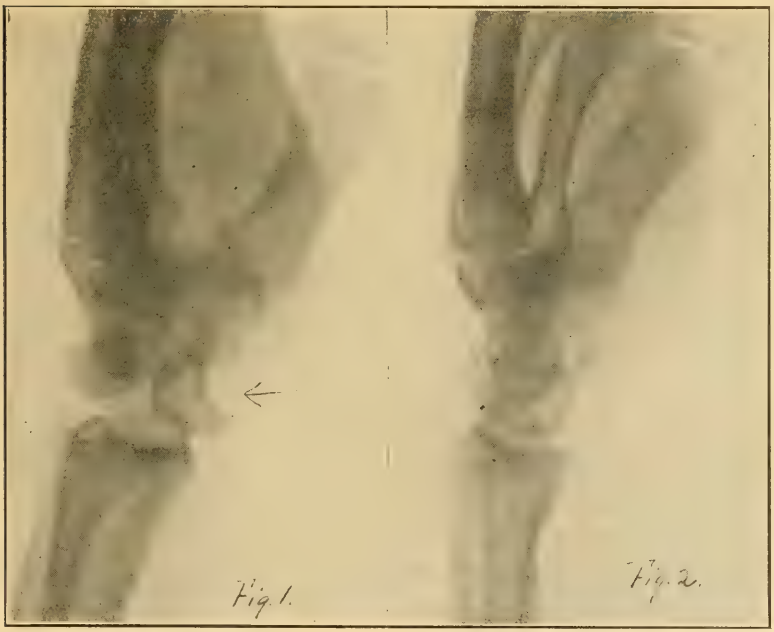
Roentgen-ray examination several months after the injury shows an unrecognized dislocation of the semi-lunar bone of the wrist.

Clinical Diagnosis.—Wrist injury.

Dislocation of the semi-lunar bone of the wrist is a rather rare accident and it is generally believed that it is practically impossible to reduce it.

The following case is an exception to the rule.

The patient fell from a horse and is not certain as to just how the wrist was injured. Thinks he struck the ground with his wrist under him. The wrist rapidly became swollen and stiff and painful. Stereoscopic x-ray examination showed a forward dislocation of the semi-lunar bone (Fig. 1). The patient was etherized, the wrist pulled, flexed and extended with strong pressure over the dislocated semi-lunar. The bone was felt to slip and another roentgenogram showed that it was back in place (Fig. 2). A posterior splint was applied with the wrist in a partially flexed position. The result was excellent.



A series of roentgenograms were shown of cases in which the bone changes resembled those seen in cases of "Osteochondral Trophopathy" (Legg) or "Osteo-chrondritis Deformans Coxae Juvenilis" (Perthes).

Clinical Diagnosis.—Tuberculosis of the hip.

The patient, a boy of thirteen, six months ago fell through a broken board and hurt his right hip. He began to limp soon after and has been getting gradually worse. He had pain in the knee of the affected side.

Examination showed an apparent and real shortening of the right leg. There was muscle spasm around the hip and atrophy of the thigh. A subcutaneous tuberculine test was negative.

The roentgen-ray examination showed a rarefied area in the neck of the femur and there was some irregularity in the shape of the epiphysis of the femur and in the outline of the acetabulum. A diagnosis was made of hemorrhagic osteomyelitis. For similar cases see (Barrie-Annals of Surg, Feb., 1915).

A long hip spica of plaster of Paris was applied to the patient and the symptoms all cleared up.

Six months later a roentgenogram showed that the cavity in the neck of the femur had filled up.

Roentgenograms taken respectively ten months, twelve months and seventeen months after the first examination showed the development of a condition resembling " Perthes disease."

The impression given by this case was that an incipient " Perthes disease " was present in the hip previous to the injury. The injury caused a hemorrhagic osteomyelitis and this unstabilized the hip so that the " Perthes disease " developed fully.

Clinical Diagnosis.—Deformity of knee.

The appearance of the knee suggests a backward dislocation of the tibia.

The patient was a boy aged fifteen. He says that he has noticed his knee getting deformed for the past year.

A roentgenogram shows that the epiphysis of the tibia is distorted.

Clinical Diagnosis.—Weak wrist.

The patient, a young man, complains of weakness in the wrist. There is no history of any trauma or disease. The patient says that five years before he had a similar attack which cleared up after a time.

Roentgen-ray examination shows a shrunken, more dense than normal, semi-lunar bone. The appearance is very similar to that seen in " Kohler's Isolated Disease of the Scaphoid of the Foot."

Clinical Diagnosis.—Injury to the wrist.

The patient was an adult male. A roentgenogram was taken of his wrist for a recent injury. The roentgenogram was negative for recent injury, but it showed a much shriveled and distorted epiphysis of the lower end of the radius, evidently of long standing.

Clinical Diagnosis.—Acute hip disease.

The patient was a boy of fourteen, who complained of very severe pain in the hips. The thighs were partially flexed and there was marked muscle spasm. There was some fever present. The Wassermann test and subcutaneous tuberculine test were negative. The boy's parents said that he had always had a peculiar walk.

A roentgen-ray examination of the hips showed deformity of the epiphysis of the upper end of both femora that could be diagnosed as "Perthes disease."

At a subsequent examination the wrist joints were noticed to be slightly deformed and roentgenological examination shows changes in the epiphysis very similar to those found in the hip. The same changes were found in the elbow, shoulder, knees, etc.

A study of the above cases would seem to show that bone changes similar to those found in "Perthes disease" may be found in joints other than the hip.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.

COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.
BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF SEPTEMBER 1921

Tuberculosis	5	Grippe	1
Typhoid Fever	1	Brights Disease	14
Diphtheria	0	Apoplexy	4
Scarlet Fever	0	Cancer	10
Whooping Cough	2	Accidents and Violence	11
Measles	0	Deaths under one year	15
Diarrheal Diseases	8	Deaths over 70 years	24
Pneumonia	1	Death rate	11.50
Broncho Pneumonia	3	Death rate less non-resident	9.70
Influenza	0		

Deaths in Institutions

	Non. Res.	Res		Non-Res.	Res.
St. Margaret's Home	3	2	Dominican Convent	0	1
Brady Maternity	0	1	Nurses Training School	0	2
Albany Hospital TB Camp	0	1	Penitentiary	1	0
Home for Incurables	1	1			
St. Peter's Hospital	3	2		16	35
Homeopathic Hospital	4	10	Births		184
Albany Hospital	4	15	Stillbirths		2

DIVISION OF COMMUNICABLE DISEASES

Typhoid Fever	2	Tuberculosis	22
Scarlet Fever	7	Mumps	3
Diphtheria and Croup	37	Pneumonia	13
Chickenpox	3	Influenza	5
Smallpox	0	Septic Sore Throat	2
Measles	0	Baciliary Dysentery	1
German Measles	0		
Whooping-cough	9	Total	104

Number of days quarantine for scarlet fever:
Longest............ 31 Shortest............ 30
Number of days quarantine for diphtheria:
Longest............ 30 Shortest............ 11
Fumigations:
Rooms......... 78 Buildings 20
Milk bottles disinfected.................................... 88

Communicable Diseases in Relation to Schools

	Reported D.	S.F.	M.
Public School No. 1	1	..	..
Public School No. 3	1	..	..
Public School No. 6	2	..	..
Public School No. 8	1	..	..
Public School No. 10	8	..	..
Public School No. 20	1	1	..
Public School No. 21	1	1	..
Public School No. 22	1	..	..
Public School No. 24	1	..	..
Lady Help of Christians School	2	..	..
St. Patrick's School	1	1	..
Lady of Angels School	2	..	..
St. Ann's School	1	..	..
St. Casimir's School	4	..	..
Vincentian Institute	..	1	..

MISCELLANEOUS

Cards posted for communicable disease	36
Cards removed	17
Notices served on schools	53
Notices served on stores and factories	10
Postal card returns sent to doctors	36
Postal card returns received from doctors	17
Inspections and reinspections	42
Vaccinations	285
Vaccination dressings	522

Children examined for employment certificates	28
*Number of employment certificates issued	0
Taking specimens of blood for Wassermanns	0
Taking smears for Gonococci	0
Cultures	13
Dogs examined for rabies	1
Dogs re-examined	1
Postal cards sent to milk dealers	21

*Not issued by this Bureau since September 1st, as required by State Education Law.

Tuberculosis

Living Cases on record September 1, 1921		580
Cases reported:		
By card	22	
Dead Cases by Certificate	0	22
		602
Dead Cases previously reported	5	
Dead Cases not previously reported	0	
Removed	5	
Died out of town	1	
Recovered	0	
Unaccounted for	0	11
Living cases on record October 1, 1921		591
Total Tuberculosis Death Certificates		5
Non-resident deaths:		
Albany Hospital Camp	0	
C. F. L. Pavilion	0	
County Hospital	0	
St. Margaret's House	0	
City at large	0	0
Resident deaths		5
Visits to cases of tuberculosis		35
Visits to physicians		10
Miscellaneous visits		20

LABORATORY REPORT

Diphtheria

Initial Positive	43	Unsatisfactory	6
Initial Negative	234		
Release Positive	63	Total	498
Release Negative	152		

Sputum for Tuberculosis

Positive	33	Unsatisfactory	0
Negative	102		
		Total	135

Widals

Positive	3	Unsatisfactory	5
Negative	27		
		Total	35

Meningococcus

Positive	0	Negative	0
		Total	0

Wassermann Tests.

Positive	43	Unsatisfatory	17
Negative	191		
		Total	251

Gonorrhoea Examinations.

Positive	30	Negative	45
		Total	75
Milk Analyses	182	Miscellaneous Examinations.	11
Water Analyses	1		
Pathological Examinations..	0	Total Examinations	1,188

HEALTH PHYSICIAN'S REPORT.

Cases assigned	37	Calls made	88

DIVISION OF SANITATION.

Complaints		130
Inspections		128
Plumbing	19	
Sanitary	109	
Reinspections		51
Plumbing	16	
Sanitary	35	
Garbage collected from 1st District bbls.		560
Garbage collected from 2nd District bbls.		435
Garbage collected from 3rd District bbls.		705
Garbage licenses issued		0
Licenses for ashes issued		1

HEARINGS.

Hearings	0	Cases heard	0

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections		100	Houses tested		31
Old houses	30		Smoke	0	
New houses	70		Blue or red	1	
Permits issued		49	Peppermint	0	
Plumbing	47		Water test	30	
Building	2		Houses examined		20
Plans submitted		25	Re-examined		30
Old buildings	4		Valid	11	
New buildings	21		Without cause	9	
			Violations		0

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	8	Cats removed	35
Dogs removed	20		
		Total	63

91 cases of eggs removed.

DIVISION OF MARKETS AND MILK.

Public market inspections	14	Cows quarantined	3
Market inspections	79	Cows rejected	21
Fish market inspections	12	Milk depots inspected	47
Slaughter house inspections	0	Inspections of stores selling milk	14
Rendering establishment inspections	0	Dairies inspected	110
Pork packing house inspections	5	Milk houses examined	110
Hide house inspections	0	Milk cans inspected	210
Cows examined	1,224	Milk cans condemned	0
		Complaints investigated	3

Laboratory Work Done at Bureau.

Lactometer readings	96	Fat tests	29
Temperature readings	96	Sediment tests	56

Medical News

THE RADIOLOGICAL SOCIETY OF NORTH AMERICA publishes the following program of the annual meeting to be held at the Hotel Sherman, Chicago, December 7th, 8th and 9th, 1921:

WEDNESDAY MORNING.

9:00 Short Business Session.
9:30 Dr. Hugh J. Means, Columbus, Ohio.
The Planning and Equipment of a Modern X-ray Laboratory.
10:00 Dr. Ulysses S. Kann, Binghamton, N. Y.
The Radiologist in Small Communities.
10:30 Dr. Donald S. Childs, Syracuse, N. Y.
What is X-ray Diagnosis?
11:00 Dr. Leon J. Menville, New Orleans, La.
The Standardization of Absorptive Powers of the X-ray by Salts of the Various Metals.
11:30 Dr. H. E. Robertson, University of Minnesota.
Team Work with the Pathologist.

WEDNESDAY AFTERNOON.

1:30 Dr. Wm. F. Petersen, University of Illinois, Chicago.
Organ Stimulation by Roentgen Rays.
2:00 Dr. A. S. Warthin, University of Michigan.
A Pathological Phase of Radiology.
2:30 Dr. Guilleminot (Faculte de Medicine), Paris.
The Biological Reaction of the More Penetrating Radiations.
3:00 Dr. Francis Carter Wood, Director Crocker Institute, New York City.
Biological Determination of X-ray Dosage.
3:30 Dr. James W. Mavor, Ph. D., Schenectady, N. Y.
The Effects of X-rays on Inherited Characteristics. Practicability Demonstrated by Record of 100 Cases.
4:00 Dr. A. U. Desjardins, Mayo Clinic, Rochester, Minn.
Radium and X-ray Therapy in Malignancy: Indications, Contra-Indications, Limitations and Recent Developments.
4:30 Dr. Carl Ballard, Omaha, Nebr.
Preoperative Radiation Treatment of Malignancy.

WEDNESDAY EVENING.

Joint Meeting with Cook County Medical Society and Chicago Roentgen Society.

THURSDAY MORNING.

9:00 Dr. Chas. F. Bowen, Columbus, Ohio.
The Use of Radium Needles in Treatment of Cancer.

9:30 Dr. Russell H. Boggs, Pittsburgh, Pa.
Treatment of Carcinoma of the Breast by Surface Application of Roentgen Rays and Radium, Supplemented by Imbedding Radium.

10:00 Dr. Douglas Quick, New York City.
Treatment of Neoplasms of the Tonsil.

10:30 Dr. W. D. Witherbee, New York City.
Focal Infection of the Throat by X-ray as Compared with Surgical Removal of Tonsils and Adenoids.

11:00 Dr. Robt. H. Lafferty, Charlotte, N. Car.
Radiotherapy of Diseased Tonsils.

11:30 Dr. A. J. Pacini, Washington, D. C.
The X-ray Treatment of Tonsils with the Conjoint Use of Ultra-Violet Radiation.

THURSDAY AFTERNOON

1:30 Drs. Donaldson and Knappenberger, Kansas City, Mo.
Clinical Observations in Radio Therapy of Uterine Cancer.

2:00 Dr. Roscoe Smith, Lincoln, Nebr.
Roentgen Treatment of Malignant Tumors.

2:30 Dr. Wintz, Erlangen, Germany.
Our Method of Roentgen Deep Therapy of Malignant Tumors.

3:00 Dr. G. E. Richards, Toronto General Hospital.
Some of the Less Common Uses for X-ray Therapy.

3:30 Dr. Leo E. Pariseau, Montreal, Que., Canada.
Unsolved Problems and Debatable Points in Short-Wave Therapy.

4:00 To be announced.

4:30 To be announced.

THURSDAY EVENING

BANQUET

Conferring of Honorary Degrees.

FRIDAY MORNING

9:00 Business.

9:30 Dr. M. J. Hubeny, Chicago, Ill.
Positional Anomalies of the Gastro-Intestinal Tract.

10:00 Dr. A. W. Crane, Kalamazoo, Michigan.
Duodenal Bulb Deformity in Relation to Symptoms and Chemistry of the Gastric Juice.

10:30 Dr. Russell D. Carman, Head of Radiological Section, Mayo Clinic, Rochester, Minn.
Some Errors in the Roentgen Diagnosis of Duodenal Ulcer.

11:00 Dr. Lewis Gregory Cole, New York City, N. Y.
Diagnosis and Classification of Gastric Ulcers.

11:30 Dr. A. W. Erskine, Cedar Rapids, Iowa.
The Effect of Chronic Appendicitis on Intestinal Motility.

FRIDAY AFTERNOON.

1:30 Business Session.

2:00 Dr. Mary Elizabeth Hanks, Chicago, Ill.
The Treatment of Fibromata of Uterus by Roentgen Rays.

2:30 Dr. H. M. Jones, University of Illinois.
Control of X-ray Therapy in Hyperthyroidism by Basal Metabolism Test.

3:00 Dr. Harvey W. Van Allen, Springfield, Mass.
Basal Metabolism, Hyperthyroidism and Radiotherapy.

3:30 Dr. E. A. Merritt, Washington, D. C.
Subject to be announced.

4:00 Dr. Geo. Pfahler, Philadelphia, Pa.
Subject to be announced.

4:30 Dr. H. J. Ulman, Santa Barbara, Calif.
Dosage Factors in Roentgen Therapy.

FRIDAY EVENING.

8:00 Dr. Rollin H. Stevens, Detroit, Michigan.
Development of Carpal Bones in the Feeble Minded.

8:30 Dr. LeRoy Sante, St. Louis, Mo.
A Study of Hilus Pneumonia by Radiographic Examination.

9:00 Dr. Fred Hodges, Richmond, Va.
The Information Gained from the Chest Examination of One Hundred Infants.

9:30 Dr. Leonard G. Crosby, Denver, Colo.
Subphrenic Abscesses and Their Roentgenological Evidence.

SATURDAY MORNING.

9:00 Dr. W. W. Wasson, Denver, Colo.
Subject to be announced.

9:30 Dr. W. D. Coolidge, Ph. D., Schenectady, N. Y.
High Speed Radiography.

10:00 Dr. James G. Van Zwaluwenburg, University of Michigan.
Pneumoperitoneum of the Female Pelvis.

10:30 Dr. Byron Darling, New York City.
A Dental Phase of Radiology.

11:00 Dr. E. C. Koenig, Buffalo, N. Y.
Urological Cases.

11:30 Dr. Robert A. Arens, Chicago, Ill.
The Gallbladder.

PERSONALS.—Dr. HAROLD A. PECK (A. M. C., '16) announces the opening of his office at 234 State street, Albany, N. Y., for the practice of obstetrics.

—Dr. IRVING VAN WOERT (A. M. C., '17) is in practice at Delmar, N. Y.

—Dr. REGINALD VAN WOERT (A. M. C., '20) is in practice at Ravena, N. Y.

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ALBANY
MEDICAL ANNALS

Original Communication

SOME THEORETICAL CONSIDERATIONS OF INFLAMMATORY AND NEOPLASTIC CONDITIONS IN LYMPH NODES.

Read before the meeting of the Interurban Surgical Club, at the Albany Hospital, Albany, N. Y., November 25, 1921.

BY VICTOR C. JACOBSON, M. D.,
Professor of Pathology, Albany Medical College.

The present trend of thought regarding the physiology and pathology of lymphoid tissue is along more rational lines than in previous decades, and clinicians and pathologists have done the most to acquaint us with its function in health, as well as with its reactions in disease. But its rôle is still more or less enveloped in a veil of mystery. In the 1921 edition of Howell's textbook of physiology no consideration is given lymphoid tissue as such. With so few facts of its normal function given credence, it is not surprising to see much misunderstanding of its pathologic physiology and pathologic anatomy. The filtering action of lymph nodes has acquired general recognition through adequate proof, particularly the removal from the afferent lymphatics of foreign bodies such as pigments, tumor cells, and bacteria, and the extraction of toxins from the afferent blood vessels or from a lymph stream which has drained a toxic focus.

In consequence of the reception of so diverse a group of substances, many of which are detrimental to the further function of the tissue, the histological changes are, as might be expected, very bizarre. The lesions can be described in a general way as inflammatory, toxic, or neoplastic. The differences between these types are very often not well defined, and an abundant literature is witness of clumsy if well-intentioned attempts at systematizing the many pathological pictures. Mallory's classification of tumors, for instance, has surely clouded rather than cleared the atmosphere in this most debatable class of lymphopathies.

I shall not describe the anatomy of a lymph node as that is familiar to you, but only recall to your minds the various kinds of indigenous cells. These are (a) the large mononuclear cells of the germinal centers, (b) the large and small lymphocytes, (c) the reticulo-endothelial cells, and (d) the fibroblasts. Simple hyperplasia of each of these elements can occur and changes in one of them are usually accompanied by histological evidence of disturbance in one or more of the others. The " hypertrophied " tonsil is a good example of germinal center hyperplasia in response to low grade chronic infection, and the first response to irritation in most lymphoid tissue is of this same nature, following the general law in pathology that irritation in small degree stimulates. The lesions of status lymphaticus are essentially those of germinal center overgrowth and while the explanation of this condition is often that it is a dyscrasia, nevertheless there are in some cases many earmarks of its having a toxic or infectious basis. Lymphocytosis in the peripheral blood stream may or may not be a concomitant feature. In these lesions the small lymphocytes may be in comparatively small numbers in the lymph nodes, owing to the great increase in size of the germinal centers.

In pseudo-leukemia there is generalized lymph node enlargement with tremendous overgrowth of the germinal centers, but with no significant blood changes. Hyperplasia of the small lymphocytes which is most extreme in aleukemic leukemia and chronic lymphocytic leukemia, may cause obliteration of the germinal centers. Following overproduction of the cells of the germinal centers a " crisis " of lesser or greater degree may occur with lymphocytosis or leukemia of the acute type with mononuclears and transitionals of lymph node origin predominating in the blood stream. The behavior of the reticulo-endothelial cells in these conditions seems passive, but there are circumstances which call forth extraordinary endothelial cell reaction. One thinks at once of tuberculosis and Hodgkin's disease. The responses in the lymph nodes to the etiological agent of these diseases are strikingly dissimilar although their names have for many years been uttered in the same breath.

Hodgkin's disease and tuberculosis usually at first show a stimulation of the germinal centers. In the former, the toxic agent soon produces more specific changes, proliferation of the reticulo-endothelial cells and small lymphocytes, later almost total destruction of the lymphocytes, infiltration by eosinophiles and neutrophiles and even actual abscess formation. A gradually progressing fibrosis eventually leads to disappearance of all lymphoid tissue. Sometimes the endothelial cell reaction may be so intense as to overshadow the rest of the picture. This may be a late scene in the course of events in tuberculosis as well, and endothelioma of lymph nodes has been known to follow both these affections (1).

There may be great differences in the proportions of the reactions of the various cell types in Hodgkin's disease and while it has its characteristic blood picture, lymphocytic leukemia has been known to develop on such a foundation (2). Which brings us to a discussion of another variety of lymphopathy. "Lymphosarcoma" in the sense of Kundrat implies a tumor composed of cells of "lymphoid type" lying in a reticulum and having a marked tendency to invade the surrounding tissues. A leukemic blood picture has been known to be a sequela of such a condition (3). In acute and chronic lymphocytic leukemia the widespread involvement of lymphoid tissue and infiltration of organs including the skin, are regarded as evidence that they are really malignant tumors with metastasis by way of the blood stream.

In this short discussion I shall confine myself to the lymphocytic leukemias, lymphosarcoma and Hodgkin's disease, and endeavor to indicate the lines of least resistance in trying to formulate a rational conception of these processes. Attempts have been made to correlate these diseases but without sufficient consideration of the pathogenesis of the clinical and pathological pictures. To call each of these lesions lymphoblastoma is to cover them with a cloud which makes difficult the penetration of light. As was mentioned before the leukemic state may develop as a late or terminal event in Hodgkin's disease and in lymphosarcoma. Bunting (4) has seen a case in which following an infection of the hand acute enlargement of an epitrochlear node of the same side ensued with the early development of a leukemic blood picture.

Having recognized these peculiar reactions it cannot fail to strike one that in lymph nodes we are dealing with a most capricious tissue. In youth lymph nodes become enlarged under the influence of numerous irritants, infectious and toxic, and microscopic changes must be even more frequent. During the first two decades of life a leukemic blood picture is rarely met with, the obvious effects of the toxic agent being confined to the lymph nodes. Leukemia is most frequent after the thirtieth year. Hodgkin's disease is essentially a disease of youth and early adult life. In the young, therefore, it appears that the lymphocytes are more susceptible to destruction than in adult life when, as they are not so readily destroyed, they are poured forth into the blood stream.

One of this group which has been studied intensively in an experimental way is Hodgkin's disease. When viewed in all its aspects Hodgkin's disease appears as an infectious state. There is an inflammatory reaction, most marked early in the course, with a periodic fever of the Murchison or Pel-Ebstein type, a moderate anemia and usually a fatal termination. If the pathologist sees the tissue in certain of the late stages only, he might have reason to dismiss it as a tumor, but he cannot in justice to himself overlook the clinical picture and the primary lesions. At first proliferation of the lymphocytes and the reticulo-endothelial cells occurs, with the latter reacting in a more specific manner by forming giant cells of the so-called Dorothy Reed type. Bunting and others have found a pleomorphic diphtheroid organism in the diseased nodes. Miliary abscesses may form and from them a diphtheroid bacillus has been recovered in pure culture (2). A culture of this organism injected into guinea pigs may cause death in three or four days (8).

Dick (6) in 1920 reported a case of cerebro-spinal meningitis due to a diphtheroid, and more recently Miller and Lyon recorded a case of meningitis in an infant caused by a diphtheroid organism. To assert that an organism is without pathologic significance simply because it is a diphtheroid, in the light of the facts of their sole presence in abscesses in human lymph nodes, their ability to kill a guinea pig in so short a time, and their being able to produce fatal meningitis in infant and adult, throws the burden of such a statement upon the maker thereof. Surely there must be diphtheroids—and diphtheroids. Injection into Macacus Rhesus monkeys of diphtheroids from nodes of Hodgkin's disease has, in the hands of Bunting, produced the early lesions of the disease but not the late lesions. Possibly very young monkeys would offer more favorable soil for the study of this disease which in the human occurs most often in youth and adolescence.

A gradually increasing fibrosis proceeds in the lymph nodes and the final picture may be that of dense scar tissue. Or leukemia may intervene, or an endothelioma or lymphosarcoma arise in the affected nodes (1). The late manifestations then may be those of a malignant tumor, and granting for the sake of argument that Hodgkin's disease is a tumor, because of very suggestive evidence I feel that it is a tumor of which we know considerable regarding its etiology.

In the lymph nodes of Hodgkin's disease and the lymphocytic leukemias the first groups involved are usually found to be draining an infected area. The progression to the lymphoid tissue generally suggests metastasis or the circulation of a toxin or bacterium having a predilection for such tissue.

In the young the vulnerability of lymphoid tissue is seemingly out of all proportion to the intensity of the infection and this vulnerability is something which cannot be measured or its results foretold. The biological laws governing the reaction of lymphoid cells to irritation may be the same as those applicable to other types of tissue but frequently the cellular changes are, to say the least, kaleidoscopic.

Chronic irritation undoubtedly plays an important rôle in the production of many epithelial and connective tissue tumors. The effect of chronic irritation in the form of toxins or bacteria upon so capricious a tissue as that of lymph nodes may, with reason, be expected to be shown in many ways, and the response of the various indigenous cells, at different ages of the individual, to certain factors, many primarily infectious, may present the picture of pseudoleukemia, lymphocytic leukemia, Hodgkin's disease or lymphosarcoma, the leukemias developing chiefly in the adult, the others in the young.

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(3) Bunting, C. H.: *ibid.*, 367.

(4) Bunting, C. H.: *ibid.*, 363.

(5) Bunting, C. H.: *ibid.*, 358.

(6) Dick, Geo. F., "A Case of Cerebro-spinal Meningitis due to a Diptheroid," *Journal of of the American Medical Association*, January 10, 1920.

(7) Miller, M. K., and Lyon, M. W. Jr., "A Case of Meningitis in an Infant due to a Thread-like Diptheroid Organism," *American Journal of the Medical Sciences*, 1921, 162, 4, 593.

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Clinical and Pathological Notes

Reports from the Roentgen-ray Laboratory of the Albany Hospital. By John M. Berry, M. D., and Wm. P. Howard, M. D.

The thirteenth conference of the Roentgen-ray Department of the Albany Hospital was held on October 25, 1921. The conference was largely attended and out of town guests were present from Cohoes, Amsterdam and Schenectady. The cases presented were as follows:

Clinical Diagnosis.—Chronic cholecystitis and cholelithiasis.

The patient had complained of pain in the upper right quadrant of the abdomen for a year or more. This pain ran through to the back and up to the shoulder. The pain was cramp like in character, was very severe and usually occurred at night. The patient also suffered from indigestion and a feeling of distress in the stomach associated with gas. These symptoms were not relieved by carminatives.

On physical examination there was tenderness and rigidity over the right upper quadrant of the abdomen. There was also some tenderness over the right lower quadrant.

The history of the case and the physical findings seemed typical of gall stones and a Roentgen-ray examination of the urinary tract and the gall bladder was ordered to confirm the diagnosis, if possible.

The roentgenogram of the urinary tract taken with the patient lying on her back showed an irregularly circular shadow about two centimeters in diameter superimposed on the shadow of the right kidney, suggesting a stone in the kidney. A roentgenogram of the gall bladder region taken in the prone position showed the above shadow outside the shadow of the kidney and smaller and clearer in outline than in the previous roentgenogram.

The clinical and Roentgen-ray diagnosis of gall stones was confirmed by operation.

Clinical Diagnosis.—Stone in the urinary tract.

Four or five years ago the patient had an attack of what was diagnosed as indigestion. In October, 1920, he had an attack of pain and vomiting associated with constipation. He had a chill. A diagnosis of partial intestinal obstruction was made at that time. In June, 1921, the patient had an attack of vomiting, chill, but no rise in temperature. He had right-sided abdominal pain which extended into the testicle and penis. He was tender to palpation over the right kidney and blood cells were found in the urine.

Roentgen-ray examination showed a shadow which was diagnosed as a small stone in the right ureter. Later the stone was voided.

It is the experience of the Roentgen-ray Department that it is practically impossible to diagnose the situation of a stone in the urinary tract by the character of the pain and it has also been noted that vomiting is one of the most common symptoms associated with urinary calculi.

Clinical Diagnosis.—Fracture of shaft of radius and ulna in a child six years old.

A roentgenogram was shown taken shortly after the injury and after the fracture had supposedly been reduced. The fragments were badly out of alignment at this time, but a roentgenogram taken three months later showed firm union with but very little deformity.

This case illustrates the wonderful power of new bone formation to overcome deformity in fractures in the young.

Clinical Diagnosis.—Pulmonary tuberculosis and hydropneumothorax.

Roentgenograms of this case taken in the erect and lateral positions show very beautifully the migration of the gas bubble which enables a Roentgen-ray diagnosis of hydropneumothorax to be made.

Clinical Diagnosis.—Cystic kidney.

The patient was a school girl aged 13, who complained of abdominal pain and vomiting.

The patient had her first attack about two years ago. A tumor mass appeared in the left side, suddenly. This was associated with nausea and vomiting and coffee-colored urine. The tumor mass and symptoms cleared up in twenty-four hours as suddenly as they had appeared.

Attacks similar in character have appeared many times since. They have been as frequent as two weeks apart, but they only last about two days at a time. In all attacks the mass disappears and all symptoms clear up suddenly.

On physical examination a tumor mass can be felt high up on the left side of the abdomen. This mass feels cystic and is apparently not affected by respiration. The urine examination is negative except for a faint trace of albumen.

A roentgen-ray examination of the urinary tract showed what was apparently the shadow of an enlarged left kidney. A ureteral catheter was passed and the pelvis of the kidney was injected with thorium. The pelvis of the kidney was found to be markedly enlarged and a constriction of the ureter was demonstrated. The thorium was still in the pelvis of the kidney after six hours but had spread out over a considerably larger area than originally. A diagnosis of hydronephrosis and cystic kidney was made which was confirmed by operation.

Clinical Diagnosis.—Fracture of the spine.

Roentgenograms were shown of two cases of fracture of the vertebra. One case was practically free from symptoms except for a well-marked angular kyphosis at the site of the fracture. There was no displacement of the vertebra in this case, but it was crushed down into a wedge-shaped mass.

In the second case there were marked symptoms of paralysis, loss of sensation, etc. No kyphosis was present, but the roentgenograms showed some displacement of the vertebra.

Clinical Diagnosis.—Foreign bodies in the gastro-intestinal tract.

Baby, aged 13 months. Open safety pin in the oesophagus. No manipulation. Pin passed out of intestinal tract in three days.

Baby, aged 9 months. Open safety pin in mid-oesophagus. Same position as preceding case. Attempted operative removal resulted in the death of the patient.

Baby, aged two years. Carpet tack swallowed six hours before entering the hospital. There was slight motion of the patient when the first roentgenogram was taken and the tack was not visible. In the second roentgenogram the tack was distinctly visible in the region of the pelvis. The tack was passed twelve hours later.

Baby, aged two years. Patient swallowed a nail two inches long. Roentgenogram showed the nail in the stomach. The nail was passed out of the intestinal tract in thirty hours.

Adult. Swallowed three inches of the lower end of a pen holder with a stub pen in the holder. This remained in the stomach for ten days and then passed out of the intestinal tract without interference.

These cases illustrated the value of withholding operation until it is certain that the foreign body will not be expelled normally.

Clinical Diagnosis.—Retro-pharyngial abscess.

The patient was a boy, aged fourteen, who entered the hospital June 2, 1921.

Six weeks previous to admission the patient suffered an acute respiratory infection clinically influenzal in type. There was no broncho-pneumonia.

On admission the complaint was a steadily increasing difficulty in breathing, swallowing and talking.

On physical examination a large retropharyngeal abscess was discovered rather low in the pharynx, the upper border reaching to the level of the epiglottis. Heart and lungs negative—white blood count 11,600.

A large amount of pus (between 8 and 12 ounces) was evacuated from the abscess. Following the operation the patient expectorated large quantities of pus and when he began to eat, pus would well up into his mouth.

This phenomenon occurred when he swallowed barium in the x-ray department. No barium was returned in the material which welled up into his mouth. It was a thick, greenish mucopus. The major portion of each bolus of barium passed into the oesophagus. (The posterior mediastinum was clear before the administration of the barium.) Some of the barium gravitated from either side of the pharynx along the sides of the trachea into the mediastinum as far as the aortic arch. This observation was made on the 13th of June.

The patient developed a pericardial friction rub and later a blowing systolic murmur at the apex.

Repeated examinations of the material expelled was negative for tubercle bacilli. No elastic fibres were demonstrated. Cultures from the abscess yielded staph. aureus; gram positive cocci in chains which were not recovered for identification; gram positive spores; and mycelial forms of one of the higher bacilli, also gram negative cocci.

The expectoration lessened and a week later it was possible to refill the space demonstrated on the 13th.

The fever ranged from 99 to 102 and continued to fluctuate between these two points during his stay in the hospital. Toward the latter weeks it did not touch the high point at such frequent intervals. The patient still had evidence of endocarditis when he went home on July the 4th. He had improved but slightly. He died on August the 18th.

Clinical Diagnosis.—Esophageal obstruction.

The patient was an adult female who entered the hospital August 8, 1919.

She complained of pain and choking sensation during the act of swallowing. In her attempts to swallow food she would raise a large quantity of mucus.

In the past her health had been excellent up to the onset ot the present trouble which began four years ago in 1915. Her average weight was 147 pounds; her present weight is 91 pounds.

Physical examination is negative except for a tender point below the xiphoid and to the right of the median line which is accentuated by deep pressure.

The roentgen-ray examination shows a dilatation of the esophagus with a very small amount of barium passing into the stomach.

The Wassermann reaction is negative.

On August 11, 1919, a gastrostomy was performed. The cardiac end of the stomach was palpated and during inspiration a small movable body of firm consistence and smooth surface was pushed downward against the finger. The stomach was sutured to the skin through the left rectus. Roentgen-ray examination on September 6th showed no change from the previous examinaton. In August, 1920, the patient weighed 118 pounds.

Clinical Diagnosis.—Pyloric obstruction.

Adult male, aged 72, was admitted to the hospital August 28, 1921.

Patient's health was excellent until six weeks ago when he began to have attacks of vomiting and eructations of gas. During this period the patient has been constantly constipated. There has been a loss of twenty pounds in weight.

The roentgen-ray diagnosis was annular carcinoma of the stomach or chronic ulcer.

The patient was operated upon and there was found a large dilated stomach with thickened walls. The pylorus was fixed posteriorly in the abdominal cavity and no attempt was made to deliver it. At the pyloric end of the stomach was a large, firm, irregular mass which suggested carcinoma.

A gastroenterostomy was performed and the patient died.

Clinical Diagnosis.—Partial intestinal obstruction.

Patient an adult female who entered the hospital on October 4, 1921. She complained of pain in the abdomen accompanied by considerable gas. She also complained of nausea and vomiting.

In April, 1921, the patient first experienced severe pain in the epigastric region and became nauseated and vomited. This attack lasted for four days. Four or five weeks later she had another attack. The pain comes on independently of the taking of food and is not relieved by taking food. The pain radiates down toward the bladder. The abdomen distends with gas.

On physical examination the heart and lungs are negative. There are no palpable masses in the abdomen. There is a point of tenderness in the region of the gall bladder and a slight degree of spasm of the right rectus.

A roentgen-ray examination of the urinary tract was negative. The roentgen-ray examination of the biliary tract suggested a thickened gall bladder or stone. The gastro-intestinal tract was negative.

The patient was operated upon and there was found a chronic pelvic peritonitis and a carcinoma of the ilium with intussusception. The gall bladder was negative.

Clinical Diagnosis.—Abdominal tumor.

Patient is an adult male who was admitted to the hospital February 11, 1921.

The patient complained of loss of appetite and gastric distress after eating.

The onset of the present trouble dates back to November, 1920, when he first suffered sharp pains in the epigastrium after eating and at night. He belched considerable gas and was nauseated but never vomited. His appetite began to fail and meat was the first food discontinued because it caused the most distress. At times there was no distress and when the attacks came on the distress began immediately with eating and lasted one-half to one hour afterwards. On February 9th he suffered the worst attack and he caused himself to vomit by introducing his finger down his throat. The vomiting relieved his pain. He has worked steadily since the onset. His average weight was 147 pounds and at present he weighs 145 pounds.

On physical examination the patient was found to be well developed and well nourished with a peculiar yellowish brown tint to the skin. The heart and lungs were negative. The abdomen was very muscular and rigid. When the patient flexed his thighs a mass was visible in the upper half of the abdomen in the region of the right rectus muscle. It moved with respiration. Pressure over the mass caused spasm of the muscle and referred pain in the epigastrium. The point of maximum tenderness lay over the outer border of the right rectus midway between the umbilicus and the free margin of the ribs. Except for the fact that the mass moved with respiration, it gave the impression of being in the anterior abdominal wall.

Laboratory Findings:

Haemoglobin 70% with a control of 88%.

Wassermann negative.

White count 12,000.

Benzidine reaction (stool) strongly positive for occult blood.

X-ray urinary, biliary and gastro-intestinal tracts negative.

The patient left the hospital on February 16th. A positive diagnosis was not made. The patient was given a diet list, told to abstain from meat and advised to save all stools for examination.

He returned on February 24th. His distress after eating was more marked and he had lost six pounds weight during the week. Reaction for occult blood on stools strongly positive.

Exploratory operation was advised.

On March 4th, under ether anesthesia, the abdomen was opened. The wall was normal. A hard tumor mass was palpated and delivered through the incision. It was larger than a kidney and roughly of the same shape. It occupied a loop of the jejunum. The mesentery showed numerous enlarged glands, some as big as an egg. The mass itself was adherent to the omentum and the transverse colon. The involved loop was resected, but because of the extensive mesenteric involvement the mesentery was not removed. Radium (50 milligrams) was placed in the abdomen in a manner which permitted its easy removal 24 hours later.

The roentgen examination in this case, as in the previous case, was of practically no value in making a diagnosis.

Pathological report Lymphosarcoma.

Clinical Diagnosis.—Bladder trouble.

Patient an adult male, age 36. He complains of pain in the bladder and difficult urination. In 1905, the patient had typhoid fever and in 1918 influenza. Otherwise his health has always been good.

The bladder trouble began in 1916. The onset was sudden, following a beer party. The patient's bladder became greatly distended and he was unable to urinate. Ever since that time, there are periods when it is very difficult to start his urine and at such times the stream is very small. Between these periods, he urinated freely. On several occasions he has passed blood in sufficient amount to color the urine. At times urination is very painful, especially toward the end. Lately he has suffered from cramp-like pains in the lower abdomen which have been growing worse.

Physical examination negative, except for slight tenderness over the bladder area.

X-ray showed two stones in the bladder.

The stones were removed by suprapubic cystotomy.

Public Health

Edited by Arthur Sautter, M. D.

DEPARTMENT OF PUBLIC SAFETY, BUREAU OF HEALTH, ALBANY, N. Y.
COMPILED BY WILLIAM F. FULLGRAFF, REGISTRAR.
BUREAU OF VITAL STATISTICS.

DEATHS FOR THE MONTH OF OCTOBER 1921.

Tuberculosis	8	Bright's Disease	12
Typhoid Fever	0	Apoplexy	11
Diphtheria	1	Cancer	17
Scarlet Fever	0	Accidents and Violence	9
Whooping Cough	1	Deaths under one year	15
Measles	0	Deaths over 70	35
Diarrheal Diseases	3	Death rate (non-residents included)	13.68
Pneumonia	4	Death rate (non-residents excluded)	11.03
Bronchopneumonia	4		
Influenza	0		
Grippe	0		

Deaths in Institutions.

	Non-res.	Res.		Non-res.	Res.
Brady Maternity Hospital	..	2	St. Peter's Hospital	4	8
Home for the Aged	1	..	Central Fed. of Labor	..	1
Albany Hospital TB Camp	..	1	Convent of Sacred Heart	1	..
St. Margaret's House	..	2	Public Places	4	2
Hospital for Incurables	1	3			
Albany County Hospital	1	1	Total	25	34
Homeopathic Hospital	3	9	Births		180
Albany Hospital	10	5	Stillbirths		3

DIVISION OF COMMUNICABLE DISEASES.

Typhoid Fever	2	Mumps	2
Scarlet Fever	5	Pneumonia	27
Diphtheria and Croup	38	Influenza	0
Chickenpox	31	Septic Sore Throat	1
Smallpox	0	Ophthalmia Neonatorum	1
Measles	0	Poliomyelitis	1
German Measles	0		
Whooping-cough	15	Total	134
Tuberculosis	11		

Number of days quarantine for scarlet fever:

Longest	31	Shortest	30

Number of days quarantine for diphtheria:

Longest	31	Shortest	11

Fumigations:

Rooms	200	Buildings	49

Milk bottles disinfected 694

Communicable Diseases in Relation to Schools.

	Reported D.	S.F.	M.
Public School No. 3	3	..	..
Public School No. 5	1	..	..
Public School No. 7	2	..	..
St. John's School	6	..	..
Cathedral School	1	..	..
St. Ann's School	1	..	..
St. Vincent De Paul's School	1	..	..
St. Patrick's School	..	2	..

MISCELLANEOUS

Cards posted for communicable disease	29
Cards removed	48
Notices served on schools	91
Notices served on stores and factories	12
Postal card returns sent to doctors	29
Postal card returns received from doctors	48
Inspections and reinspections	36

Vaccinations	46
Vaccination dressings	342
Children examined for employment certificates	15
Number of employment certificates issued	0
Taking specimens of blood for Wassermanns	1
Taking smears for Gonococci	0
Cultures	21

Tuberculosis.

Living cases on record October 1, 1921		591
Cases reported:		
By card	10	
Dead cases by certificate	2	
		12
		603
Dead cases previously reported	6	
Dead cases not previously reported	2	
Removed	5	
Died out of town	0	
Recovered	0	
Unaccounted for	0	
		13
Living cases on record November 1, 1921		590
Total tuberculosis death certificates		8
Non-resident deaths		0
Resident deaths		8
Visits to cases of tuberculosis		132
Visits to physicians		21
Miscellaneous visits		63

LABORATORY REPORT.

Diphtheria.

Initial positive	41	Unsatisfactory	30
Initial negative	541		
Release positive	143	Total	1275
Release negative	520		

Sputum for Tuberculosis.

Positive	15	Unsatisfactory	0
Negative	89		
		Total	104

Widals.

Positive	2	Unsatisfactory	1
Negative	8		
		Total	11

Meningococcus.

Positive	0	Negative	0
		Total	0

Wassermann Tests.

Positive	60	Unsatisfactory	8
Negative	210		
		Total	278

Gonorrhoea Examinations.

Positive	21	Negative	52
		Total	73
Milk Analyses	230	Miscellaneous Examinations	1
Water Analyses	0		
Pathological Examinations	0	Total Examinations	1972

HEALTH PHYSICIANS' REPORT.

Cases assigned	48	Calls made	157

DIVISION OF SANITATION.

Complaints		55		
Inspections		36	Garbage collected from 1st District, bbls.	290
Plumbing	12			
Sanitary	24		Garbage collected from 2nd District, bbls.	290
Reinspections		41		
Plumbing	8		Garbage collected from 3rd District, bbls.	520
Sanitary	33		Garbage licenses issued	2
			Licenses for ashes issued	13

HEARINGS.

Hearings	1	Cases heard	1

Class of Cases.

Closets	1

Disposition of Cases.

Reinspection	1

DIVISION OF PLUMBING, DRAINAGE AND VENTILATION.

Inspections		140	Houses tested		24
Old houses	40		Smoke	0	
New houses	100		Blue or red	0	
Permits issued		77	Peppermint	0	
Plumbing	76		Water test	24	
Building	1		Houses examined		19
Plans submitted		30	Re-examined		36
Old buildings	1		Valid	9	
New buildings	29		Without cause	10	
			Violations		0
			Plumber's license plates issued		1

REPORT OF REMOVAL OF DEAD ANIMALS.

Horses removed	5	Cats removed	31
Dogs removed	19		
		Total	55

53 cases of eggs removed.

DIVISION OF MARKETS AND MILK.

Public market inspections	19	Cows quarantined	5
Market inspections	106	Cows rejected	27
Fish market inspections	12	Milk depots inspected	45
Slaughter house inspections	1	Inspections of stores selling milk	21
Rendering establishment inspections	1	Dairies inspected	152
Pork packing house inspections	6	Milk houses examined	152
Hide house inspections	0	Milk cans inspected	215
Cows examined	1684	Milk cans condemned	0
		Complaints investigated	0

Laboratory Work Done at Bureau.

Lactometer readings	78	Fat tests	18
Temperature readings	78	Sediment tests	0

Medical News

THE ALBANY GUILD FOR PUBLIC HEALTH NURSING.—STATISTICS FOR OCTOBER, 1921.—1. Number of new cases this month, 214. Classified economically, free, 68; bed cases, 16; prenatal, 4; dispensary soc. service, 20; tuberculosis (pos.), tuberculosis (super.), 12; venereal, 16. Paid, 146; limited means, bed cases, 87; metropolitan bed cases, 39; metropolitan prenatal, 20; Western Union, 0. Cases carried over from last month, 681; bed cases, 121; prenatal cases, 27; dispensary soc. service, 0; tuberculosis (total), 413; venereal, 120; Western Union, 0. Classification of bed cases: Medical, 70; surgical, 12; obstetrical, 43; prenatal, 24; confinements, 41; maternity, 2; miscarriages, 3; number of babies born, 43.

2. *Visits for Nurses* (all departments), 1,787; for bed care, 1,213; prenatal instruction, 70; tuberculosis (sup. and inst.), 86; venereal dis. instr., 0; general soc. service 120; for other purposes, 137; dispensary social, 115; supervision, 46.

3. *Source of Nursing Cases.*—Metropolitan agents, 32; doctors, 95; nurses, 4; dispensary, 2; family or friends, 25; other sources, 8.

4. *Disposition of Bed Cases.*—Discharged recovered, 58; discharged improved, 24; discharged unimproved, 9; discharged dead, 3; discharged to other care, 19; carried, 155. Disposition of other cases: Prenatal: Discharged to maternity care, 43; discharged to hospital, 3; discharged to other care, 5; carried, 30. Dispensary social service: Dis. dispensary care, 20; carried, 0. Venereal: Discharged cured, 1; discharged temporarily, 15; discharged to other care, 0; carried by dispensary, 95; carried under super., 16; carried under care at the House of Good Shepherd, 10. Tuberculosis: Discharged dead, 4; discharged, left town, 0; discharged, not T. B., 2; carried (positive, supervision), 411. Total number of cases carried over into November, 717.

5. *South End Dispensary Report.*—Number of clinics, 96; surgical, 9; medical, 9; gynecological, 9; prenatal, 4; eye and ear, 9; venereal, 13; nerve, 4; nose and throat, 9; skin, 10; children's lung (observation), 4; pediatrics, 8; children's lung, Dr. Lawson, 4; adult's lung, 4; clinics with doctor attending, 92; clinics without doctor attending, 4; number of new patients treated, 167; number of old patients treated, 811; total number of patients, 978.

GORGAS MEMORIAL INSTITUTE OF TROPICAL AND PREVENTIVE MEDICINE TO BE ESTABLISHED IN PANAMA.—Of particularly deep interest to all members of the Medical Profession and to all others interested in questions of Public Health and Sanitation is the recent announcement of the plans of the Board of Directors of the Gorgas Memorial for the establishment of a Memorial Institution in the City of Panama for research and the extension of means of prevention of tropical diseases.

Anyone who has seen the old Panama at the time of the abandonment by the French of the work of the first canal, involving so much wasted energy, the loss of thousands of lives and some hundreds of millions of dollars, could not but be struck with the present aspect of Panama, its splendid sanitation, its beautiful cities, its five hospitals, and above all, by the completion of the Panama Canal itself, making Panama one of the most beautiful and salubrious spots in the world.

It is well known to members of the medical profession that the accomplishment of this great work and the sanitary regeneration of Panama are due to the efforts of the late William C. Gorgas, Surgeon General of the United States Army, and to his efforts, more than to any other, success for the work must be accredited.

Coupled with his earlier work in Cuba, the accomplishment of General Gorgas in conquering Yellow Fever and Malaria and conclusively demonstrating the fact that health even in the tropics, is a purchasable commodity has sent forth his fame throughout the world. Perhaps no single life has done more for the good and well being of humanity, and his great attachment for Panama has made the proposed Memorial to carry on the work he so ably started, the most practical tribute which could be conceived to his memory.

The honor for the conception of this idea and of bringing it into actual existence belongs to Dr. Belisario Porras, the President of the Republic of Panama, who in the name of his government has tendered the site, a building, and all required equipment, valued in all at approximately $500,000. At the request of Dr. Porras,, Admiral Braisted, formerly Surgeon General of the United States Navy, with the co-operation of others equally interested in making this Memorial possible, incorporated the Gorgas Memorial Institute for the purpose, in addition to directing the scientific work, of raising an endowment fund of five million dollars for maintenance. The following officers and directors were elected:

President, Rear Admiral W. C. Braisted, U. S. Navy (Retired).

Vice-President, Dr. Franklin Martin, Secretary General—American College of Surgeons.

Directors: Dr. Belisario Porras, President of the Republic of Panama (Founder); Dr. A. S. Boyd, Chief of Surgical Service, Santo Tomas Hospital, Panama; Surgeon General Hugh S. Cumming, United States Public Health Service; Surgeon General Merritt W. Ireland, United States Army; Honorable John Bassett Moore, Judge of the International Court of Justice, The League of Nations; Honorable Leo S. Rowe, Director General, Pan-American Union; Surgeon General E. R. Stitt, United States Navy.

Dr. Richard P. Strong of Harvard University, chosen to head the Scientific Board, will be assisted by Admiral E. R. Stitt and Lieutenant Colonel J. F. Siler. Other members of the Scientific Board will be announced at an early date.

The Advisory Board, of which Secretary of State Hughes is Honorary Chairman, consists of the diplomatic representatives of all the Central and South American countries and representative committees of the leading national medical and surgical associations, public health groups, and many Southern Societies by which Gorgas was beloved.

The proposed Memorial will be built adjacent to the new two million dollar Santo Tomas Hospital, and the use of its complete facilities has been tendered the Gorgas Memorial to aid in the launching of the work.

The Memorial Building itself will consist of a dignified classic structure patterned after the lines of the Pan-American Union in Washington, D. C. It will house the laboratories and provide facilities for the teaching of students from the various tropical countries and from our own leading schools of tropical medicine, such as Harvard, Johns Hopkins, and the University of California.

In commenting upon the field of work before the Institute, Admiral Braisted stated that among the diseases which will be studied in addition to Yellow fever and Malaria, are dengue, pellagra, beriberi, leprosy, cholera, and the various mycoses. It is the consensus of opinion that tremendous advances can and will be made through the efforts of the research work in this field.

The Tropics, which are so prolific in vegetation of every kind, have been equally fertile in the development of all types and kinds of dread diseases, which tended to make them unsuited and impossible of habitation until careful sanitation made them safe. They then can become the most desirable, the most attractive, and the most prosperous of abiding places. This very fact has made the City of Panama extremely desirable as a home for the work to be undertaken.

The humanitarian benefits to accrue from the establishment of this wonderful tribute to General Gorgas are almost beyond conception. Its complete success means the fulfillment of General Gorgas' greatest desire, that of eliminating these devastating tropical diseases, and at the same time is a fitting recognition of the worldwide importance that the Profession of Medicine played in the construction of the Panama Canal.

PERSONALS.—DR. ALBERT S. FERGUSON (A. M. C., '17) is Assistant Physician at the Matteawan State Hospital, Beacon, N. Y.

—DR. HUGH S. GREGORY (A. M. C., '13) is Pathologist at the Binghamton State Hospital, Binghamton, N. Y.

—Dr. WALTER F. PREUSSER (A. M. C., '20) has accepted an appointment as surgical interne, for service of two years, at the Lenox Hill Hospital, Park avenue and Seventy-sixth street, New York City.

—Dr. WALTER E. HAYS (A. M. C., '05) writes from Rochester, Minn., that he has been traveling in the Far West, because of the poor health of Mrs. Hays, who is now in Colorado. Dr. Hays has been gaining surgical experience in the coal camps in Southern Colorado and in the hospital at Pueblo, in the interests of the Colorado Fuel and Iron Company. He expects to begin private surgical practice in the near future at some small town on the western slope of the Rockies.

—Dr. EUGENE G. STEELE (A. M. C., '06) is in Los Angeles, California, devoting himself to the eye, ear, nose and throat.

—Dr. HOWARD A. LA MOURE (A. M. C., '00) is medical superintendent of the State Hospital for the Insane at Pueblo, Colorado.

In Memoriam

GEORGE TILDEN, M. D.

Dr. GEORGE TILDEN, a graduate of the Albany Medical College, died at his home in Omaha, Nebraska, August 16, 1921, age 79 years. Dr. Tilden began his practice in Omaha in the spring of 1868, and continued to be actively occupied until the summer of 1914, nearly fifty years. He retired in the summer of 1914. At one time, he was attending physician to St. Joseph's Hospital and later attending surgeon there; was acting assistant surgeon, U. S. Army, in attendance upon officers and their families at Omaha; was under contract, for forty-five years for attending U. S. prisoners; was examining surgeon of the Bureau of Pensions; and was commissioner of insanity for forty years, and for a number of years prior to his retirement, devoted most of his time to nervous and mental diseases; was a member of the State and County Medical Societies, and was president of the latter; in his early practice, contributed articles to State medical societies and medical journals; his professional income was always very satisfactory.

EDDIE STEARNS HASWELL, M. D.

Dr. EDDIE STEARNS HASWELL, of the class of 1909, Albany Medical College, died of appendicitis November 19, 1921, aged 35 years. After graduation Dr. Haswell served for a year as intern at St. Peter's Hospital, and then began general practice in Albany. During 1914-1915 he was quiz master in therapeutics in the Medical College, and during the school year of 1917-1918 Director of the Laboratory of Microscopy at the Albany College of Pharmacy. He became an assistant attending physician at the Homeopathic Hospital and Dispensary in 1914, and was promoted to staff membership of the same hospital in 1917, when he gave special attention to neurology. He was also an attending physician at the Home for the Friendless, and at the Shelter of the Mohawk and Hudson River Humane Society; lecturer on materia medica at the Nurse's Training School of the Homeopathic Hospital, and at the Eastern New York Training School for Certified Nurses. Dr. Haswell married on October 19, 1910, Miss Ida Pulman, who survives, with one daughter and one son. Dr. Haswell was an unusually active and energetic physician and in addition to his clinical avocations held membership in several fraternal organizations and medical societies.

NEW YORK STATE MEDICAL LIBRARY.

Edited by Miss Frances K. Ray.

ANNUAL REPORT

July 1920—June 1921

At the request of the State Health Department the library planned a book exhibit for the Public Health Nurses attending the State Sanitary Officers conference in Saratoga, September 7-9, 1920. The Health Department cooperated with a collection of its own publications and assisted in the compilation of an extensive bibliography for distribution. This effort instigated a request from the Health Officers for a similar exhibit of special interest to them, at the next annual session, preparations for which are already under way.

Another exhibit was arranged for nurses attending the convention of the three state nurses' organizations in Albany, October 26-28, which attracted considerable attention from the delegates.

As a result of the advertising these exhibits gave the library, a much larger number of new borrowers has been added to the list than in any previous year, totaling 317 new names.

The circulation has increased about 700 volumes, making 5177 in all.

The Library has 26,611 bound volumes, 1109 of which were acquired during the year. At the annual inventory several hundred of the older works were moved from the open shelves to the stack to relieve congestion, leaving only books published since 1905 in the reading room.

Attendance at the Library has included 6646 readers.

The demand for the list of "Books on health as related to the school child," published two years ago as Bibliography Bulletin 64, proved so great that the edition was soon exhausted. A new edition thoroughly revised, with the needs of the school medical inspectors, special supervisors and nurses in mind, has just been completed and is now in press as Bibliography Bulletin 69.

After eight years of most acceptable service as Assistant Medical Librarian, Miss Cady resigned October first, to become Assistant Librarian at the State Laboratory. This proved a double blow to the Medical Section, in that the salary offered a successor has been insufficient to attract a trained assistant and the position is still without an efficient incumbent.

The work of the year has been further handicapped by the prolonged absence of the Medical Librarian due to illness. For four months the Library was administered by substitutes. It is interesting to note that a staff which normally consists of four members (including the page) has had fourteen on its list within a year.

Because of the frequent changes and the number of temporary assistants, statistics recorded are perhaps not as accurate as in former years, but may be accepted as approximately correct.

RECENT ACCESSIONS.

University of California. George Williams Hooper foundation for medical research. Collected reprints, v. 5, 1919-1920.
Wilder, H. H. Laboratory manual of anthropometry. 1920.
Williams, G. C. The speaking voice; a collection of vocal exercises. 1919.
Williams, J. F. Healthful living. 1920.
Williams, R. P. Physical training. 2d ed. 1920.

NEW JOURNALS.

New journal subscriptions include:

American journal of hygiene.
American journal of obstetrics and gynecology.
American journal of physiological optics.
Archives of surgery.
British dental journal.
British journal of experimental pathology.
Canadian journal of mental hygiene.
Harrower's monographs on the internal secretions.
Hospital progress.
International journal of public health.
Journal of neurology and psycho-pathology.
Journal of the Philippine Islands medical association.
Maine public health association news.
Physiological reviews.
Surgical clinics of North America.

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